How to Prepare Your Car for Winter

MOTRINE

The Car Owners Magazine

Combined with Auto Sportsman

MBER 1953 25c

CUSTOMIZE YOUR CAR AT HOME DRIVING, IN MINAICO

Minimum management

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MALLORY "BEST" COIL

The very finest in automotive ignition has been offered by MALLORY for over a quarter of a century. Always years ahead in design and workmanship, a whole generation of drivers who KNOW and WANT performance have "Mallory equipped" their cars. A complete system is available in varying price ranges suited to the individual taste and degree of investment.

The MALLORY DISTRIBUTOR of today is the result of over twenty-five years of constant research and development. It is the finest in its field and when installed with the MAGSPARK TRANSFORMER, the latest and most revolutionary addition to the Mallory line, performances are achieved which amaze the most discriminating owners. The MALLORY COIL was named the "BEST" of a long line of fine coils by its designer, and is still rated "BEST" by thousands of satisfied users.

For the owner who desires a limited investment, a complete line of dual-point conversions is available for most cars and trucks as shown below. Mallory assemblies give an advantage over other makes because Mallory STABILIZED Breaker-Points are used and conversions are available for use with the Magspark transformer as well as the single-primary conventional type coil.

Mallory conversion plate, assembly No. 25050 complete with STABILIZED BREAKERS and Condenser. Can be used with the Mallory Magspark Transformer, as well as with the single-primary ignition coils of the conventional type and the Mallory Best Coil.

	-
	1933-53
NASH RAMBLER	1950-52
NASH STATESMAN	1948-53
PACKARD, 6 Cyl. (Delco) 1	1941-47
CHEVROLET TRUCK	1933-53
INTERNATIONAL TRUCK	1941-53
GMC TRUCK	1938-53
WHITE TRUCK, 6 Cyl. (Delco) .	All
MACK TRUCK, 6 Cyl. (Delco) .	All
FARM TRACTOR, 6 Cyl. (Delco)	All
FOR SIX CYLINDER O	NLY





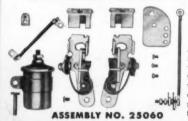
ASSEMBLY NO. 24990

BUICK (Roadmester-Super) 1950-52	PACKARD (8 Cyl. Delco) 1950-53
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Assembly No. 24990 Ball-bearing dual-point advance plate can be used in the above cars, the same as our Assembly No. 25000. However, it will not work with the conventional type or the Mallory Best Coil. It is especially designed to operate the circuits of the Mallory Magspark Transformer and must be used only with this transformer. Assembly No. 25000 Ball-bearing dual-point advance plate is designed for use with the single-primary ignition coils of the conventional type and the Mallory Best Coil.

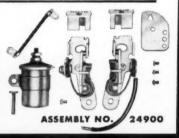


ASSEMBLY NO. 25000



Ford V-8 and Mercury, 1949-50-51-52-53 Lincoln, 1950-51 Ford Trucks, 8 Cyl., 1948-49-50-51

Assembly No. 25060 can be used in the above cars, the same as our Assembly No. 24900. However, it will not work with the conventional type or the Mallory Best Coil. It is especially designed to operate the circuits of the Mallory Magspark Transformer and must be used only with this Transformer. Assembly No. 24900 is designed for use with the single-primary ignition coils of the conventional type and the Mallory Best Coil.



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Mallory Products Advertised on the Opposite Page are Sold by the Following Concerns:

Just a few have been listed. If your city is not included, write to the factory for name of dealer nearest to you.

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21532 Meekland Ava.
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WE TAKE YOUR FORD V-8 AND ADD PLUS POWER!

The selection of this 1953 Ford Sunliner as the official Pace Car for the 500-mile race at Indianapolis is evidence of its outstanding power and beauty. Again, Ford sets the standard for the industry. In every feature - from its hull-tight Crestmark Body with Full-Circle Visibility to its choice of two high-compression engines, you'll find Ford unquestionably the pace-setter of the lowprice field. We like the '53 Ford . . . and we particularly like the way it operates with the addition of a Belond EQUA-FLOW Exhaust System. By eliminating the back pressure common to any stock engine, you obviously get more power to the rear wheels. Preclsion-engineered headers replace rough, cast-iron stock manifolds. These headers carry exhaust gases quickly and efficiently through extensions, mufflers and dual tailpipes. The Belond EQUA-FLOW Exhaust System gives your Ford more power, faster acceleration, higher top speed and more miles to the gallon of gas! So, if you drive the brilliant '53 Ford or any other V-8 car, see your nearby Belond EQUA-FLOW Exhaust System dealer or write for information,



11039 Washington Blvd. . Culver City 2, Calif.

Glove Compartment

AS THIS ISSUE OF MOTOR TREND hits the newsstands, we will have a new Detroit Editor at the wheel. He is capable. likable Don MacDonald, a writer (remember "999" in October?), an engineer (by degree and by trade) and an average guy who can talk to engineers and mechanics in their own language. Don will be at the controls of one of the most important functions in the Trend organization, getting inside and behind-the-scenes information for you from the automotive capital of the world. His interest in automobiles stems from his father, who was closely associated with Stevens-Duryea as their banker. Don says he recalls that throughout his early period the family car was a towering 1919 Brewster-bodied



MT's new Detroit Editor

Pierce-Arrow limousine, on which it was his "great delight as a toddler to shinny up the fender and shine the brasswork on the engine."

Don's ownership of cars includes a series of \$15 models, circa 1929-30, which "all went to the boneyard faster than the State of New Jersey could send me their titles"; a hopped-up '36 Ford sedan which "had a full set of genuine surplus aircraft gauges, including compass and altimeter"; a '34 Packard Super Eight convertible that was a classic "but I didn't know it. In those days before Motor Trend, funeral parlors and gangsters were the main devotees of fine automobiles"; a spanking new ... (Continued on page 6)

THE FINEST IGNITION
COIL IN THE WORLD
FAILURE-PROOF IGNITION

yes,

DSM Coils are used by many of the country's leading race drivers . . .

BUT-

The great majority of DSM Coils are purchased by the motoring public who have never been in nor ever intend to be in a race. This vast majority want PERFORMANCE, ECONOMY, BETTER IDLE, BETTER ACCELERATION as well as Top Speed and immediate reaction from their car when in a traffic pocket.

Replace your ignition coil with a DSM Coil TODAY and join this smart motoring set who are wise to the benefits and economies of TOP IGNITION and PERFORMANCE.

DSM Coils are UNIVERSAL and can be transferred from car to car, as you purchase new automobiles, giving you a lifetime of faithful service and economical performance. The economies provided by DSM COILS will return time and time again their cost to you.

Free Literature Upon Request

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This Month's Cover

Carlyle Blackwell's photo is one of the most beautiful (and one of the most peaceful) pictures we've seen of the car that's making automotive headlines— the Austin Healey "100." You'll find Walt Woron's report on the "100" on page 22. Don Pope's photo at the upper right describes Mexico perfectly-a mixture of the new and the old; the story of driving in Mexico starts on page 34.

R. E. Petersen......Publisher

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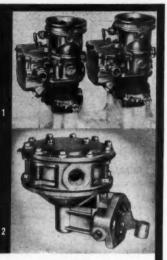
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30 years of pioneering with Custom Accessories has taught HC engineers that auto sport enthusiasts appreciate the best in quality and design at modest prices. Thus, careful attention is given each part produced, assuring you exceptional quality and the very finest in design.



you can have quality at a sensible price!

You see illustrated here just a few of the many HC quality products.

1. CHROME PLATED CARBURETORS for Ford V-8, Mercury and Chevrolet, all models. Skillfully re-manufactured to factory specifications, 2. CHROME PLATED FUEL PUMPS for Ford V-8, Mercury and Chevrolet, all models. Pumps feature all purpose neoprene diaphrams, Illustrated is the famous HC666 six valve pump especially suited for heavier engines. 3. CHROME PLATED WATER PUMPS for Ford V-8 and Mercury, Expert finishing gives these units an exceptional appearance. Reassembled with all new parts and thoroughly tested. 4. CHROME PLATED BONNETT AIR CLEANERS for nearly all cars. Knitted mesh pack guaranteed power-saving air cleansing with minimum restriction, 5. CHROME PLATED AIR CLEANER designed specifically for the new quadra-jet and extra large carburetors used by '52-'53 Cadillacs, Oldsmobiles, Buicks, Lincolns, Mercurys, etc. Knitted mesh pack may be coated with heavy oil for more certain filtering. 6. CHROME PLATED LOUVRES for improving your car's appearance. Concealed fasteners assure a smooth installation. May be functionalized simply and inexpensively.

See your nearest dealer or write for your free illustrated catalogue.

Dealer inquiries invited.



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TRIPLE CHROME PLATED AUTOMOTIVE SPECIALTIES



The Glove Compartment

(Continued from page 4)

'49 Hudson which he won for writing an essay on "Why I Bought My Used Car from a Hudson Dealer"; a "happy three weeks in possession of a liberated front-wheel-drive Audi, an obscure product of Hitler's Auto-Union"; and short ownership (in England) of "what was purported to be a 1926 three-liter Red Label Bentley," which he either had to stay in England with or go home without. He chose the latter course.

Youthful (32) Don lives in Franklin Hills (a quaint village some 20 miles from downtown Detroit) with his wife Teddy and one child. You'll be hearing lots more from him in the pages of MOTOR TREND.

BACKYARD MECHANICS drove their streamlined hot rods to 10 new international records and 14 American records at the Bonneville (Utah) salt beds a few



weeks ago, setting speed marks of over 230 mph, and in so doing pointed trends in automotive design.

One record-breaker is shown here, the Shadoff Chrysler Special driven by Malcolm Hooper. Shattering six records in the International Class C category (183 to 305 cubic inches) the streamliner was clocked at 236.36 mph average for the measured mile.

What does all this mean to the average motorist? Well, we don't expect cars capable of such speeds, but the automotive designers of the future may consider several factors. These are: body aerodynamics, fuels, and methods of getting the fuel to the combustion chamber for the greatest possible efficiency, and general efficiency of engine design. It's interesting to note that most record-setting cars were built around V-8 engine blocks from American passenger cars.

IT'S REPORTED FROM MILAN that Enzo Ferrari, one of the great men of motor racing, is to build no more of his famous cars. In the past these cars have worn almost all of the racing classics. Last year they entered 92 races and won 90 of them. The rearing black horse appeared on an official entry for the last time on September 13 in the Italian Grand Prix at

(Continued on page 71)

THIS 1940 FORD HAS GONE 143,000 nent

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..YET THE ENGINE IS **AS POWERFUL AS NEV**



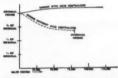
Winthrop A. Johns and the original test car—says Win "i don't expect to live long enough to wear this engine to the first overhaul! At the present rate of wear it will run at least 700,000 miles."

THIS CAR, AND Hundreds of Other Test Vehicles Are Revolutionizing Motor History By Means of a Special New Device that Neutralizes Corrosive Acids as They Are Formed!

HERE IS THE PROOF

These are FACTS not claims, gathered in 13 years of road tests over millions of miles in 1500 cars and trucks—NOT laboratory tests under simulated conditions.

No engine tested decreased in power. Many have gone 120,000 miles.



The graph above shows the normal decrease of engine power, compared with the power output of engines protected from acids. Top per-formance is yours almost indefinitely—one, two, five or even ten years. Most protected engines are outlasting their bodies.

2. IGNITION

Spark plugs last up to 60,000 miles—waste less gas. The two spark plugs shown are from a set of 8 after 60,000 miles—the entire set still testing 93% efficient!

3. FRICTION WEAR ALMOST DISAPPEARS



The bearing at left above is from an engine The bearing at left above is from an engine with Magna-Power after 112,000 miles in 11 years. It is still good for many more years of service and 4 times the miles. At right is one from an unprotected engine after 63,000 miles; IT IS WORN OUT!

IS IT ACID OR FRICTION?

Engine friction—excepting fans, pumps, belts and windage—is negligible. Our tests show almost no metal to metal contact. Acid is the real cause of motor deterioration.

SULPHUR FORMS ACIDS

Gasoline is about 1/1000th sulphur. Leaded gasoline also contains bromine and chlorine. In 1000 gallons (enough for 15,000 to 20,000 miles) there is about 6 lbs. of sulphur—enough to make there is about 6 lbs. of sulphur—enough to make 5 gallons of strong sulphuric acid. When gasoline burns, corrosive gases (SQ₂ SQ₃ HBr and HCl) blow by the pistons into the crankcase. Here they combine with condensed water (also blown by) almost always present in oil, to start a vicious circle. SQ₃ is a thirsty compound. It absorbs water to form sulphuric acid, which in turn attracts more water, which diswhich in turn attracts more water, which dissolves more SO₃, which in turn attracts more water! This water body then absorbs gases to form H2CO3, H2SO3, HCl and HBr-all corrosive acids. Acids cannot work without water— but your engine makes large amounts of it about a gallon for each gallon of gas; you have seen it drip from your exhaust!

ENGINES HAVE SHORT LIFE

In door to door service some have an appallingly short life. Often only 15,000 to 20,000 miles! Enough materials blow into the crankease to make a pint of acid a day. Most of these are removed by ventilation but the small amount left is enough to damage your engine seriously. Even carbonic acid, which you drink in soda pop is powerful enough to corrode iron 1/3 inch

NEW DIRECT WAY TO KILL ACIDS Acids destroy themselves by eating metals. Acids attack first metals most easily eaten. Almost perfect protection is obtained by a special alloy of MAGNESIUM and aluminum. Since magnesium is by far the most easily attacked metal in the engine, the acids eat it and are destroyed. Without acids, water is no longer held. Without water acids cannot form. The vicious circle is interrupted. Less sludges, gums and resins are





At left above are two cylinders of a milk truck at 65,000 miles with Magna-Power. It is 14 worn out. Identical engines in the same fleet but without Magna-Power wore out completely at 40,000 miles. At right are shown seval large city buses—part of the extensive fleet testing program.

At left above are two cylinders of a milk magna-Power and large the same fleet testing program.

SUMMARIZING:

Normal wear, as you know it, does not exist. Manufacturer's figures are increased up to 10% in economy, speed, power. Engine wear life is increased to at least 300,000 miles by adding the Magna-Power Acid Neutralizer. Magna-Power will help any engine that uses less than 1 qt. of oil each 500 miles, OR YOUR MONEY BACK. GET ONE NOW FOR YOUR NEXT OIL CHANGE- The gasoline you buy has sulphur in it. When sulphur burns it forms sulphuric acid. Sul-phuric acid eats metal. Little by little your engine is eaten away. To combat this damage, many oil companies are now using anti-acids in their oils. But what happens when these compounds are overcome? Your engine corrodes once more!

Acid is one of nature's methods of reducing refined metals to their original primitive state. Even the Shell Oil Co. has now proven that acid corrosion is the major cause of engine wear!

There is Only One Way to Safely Inhibit Acid Formation in Your Engine Of course, if you choose to carry testing ap-

paratus (litmus paper or some such other device) you might be able to tell when your oil is becoming acid, due to the destruction of the anti-acid compounds. But the easiest way, it seems to us, is to use a metal plug of MAGNESIUM and aluminum, which is by nature an alkaline metal, and which, attached to your oil drain plug, permits easy inspection at the time you change your oil. Thus you can see at a glance, by means of observing the state of corrosion of the plug, whether or not your engine is being attacked. For acids much prefer alkaline metals such as magnesium for "lunch," to the other

metals in the engine.

This Is a Very Simple Idea

However, it was developed by a mechanical engineer after many years of trial and error, using such compounds at first as potash, magnesium shavings and other devices, none of which were as easy, simple or positive as this new oil-drain plug device.

It Is Thoroughly Tested

Milk fleets, passenger cars, bus lines and trucking companies all have tested the new "Magna-Power" Neutralizer in controlled field operations. Their enthusiastic letters are available for your inspection at any time You Can See the Action in a Few Seconds If you take a Magna-Power Neutralizer and drop it into a glass of vinegar you will see it foam wildly. Even grapefruit juice will cause

an effervescent action. Experiment with the Magna Power Neutralizer at OUR Risk

If you are not satisfied with the way it works send it back, at any time (years from now, if you choose), for an immediate refund. Johns Manufacturing Company, Dept. M-4,

	Dun	ellen,	N. J.		
JOHNS M	FG. CO.,	Dept.	M-4.	Dunellen	N.J.
My car is	a			(n	nake)
				year.	
Please so neutralize that it is antee of	sold wit	h an	uncon	ditional	guer-
Name	***********				
Street	*************				
City	*************	Zone	Sto	rte	

Stop Radiator Rust FOREVER

With PROTECTO ROD, the Miniature Permanent "Battery" that Purifies Radiator Water-Stretches Engine Life!

Rust and scale accumulating in your radiator and engine water jackets during cold weather can ruin your car. These corrosive deposits cut cooling system efficiency, causing overheating, power loss, and gas waste. Then, because winpower loss, and gas waste. Then, because min-ter temperatures often prevent oil from circu-lating freely, heavy cylinder and bearing wear follows, making expensive repairs necessary thousands of miles sooner than if the system were working properly.

Danger Ahead!

Most drivers don't realize how much damage summer rust and corrosion have already caused until a cold snap causes weakened engine block or radiator to suddenly collapsethen it's too late to avoid a \$200-\$400 repair job. Right now is the time to prevent costly engine damage—before it takes place!

Here's How to Prevent Damage

This simple 2-way treatment permanently prevents radiator trouble-will restore efficiency vents radiator trouble-will restore efficiency even on older cars where rust and scale have already impaired the radiator. The ingenious McRay Protecto Rod consists of a series of small zinc and copper plates which function just like a tiny "battery," setting up a mild galvanic field which neutralizes the destructive galvanic field which neutralizes the destructive action of oxygen, ammonia and minerals in the water, and makes it impossible for rust or scale to adhere to radiator or motor block. Protecto Rod is unaffected by heat, cold, or anti-freeze solutions—can be installed in 5 seconds in any radiator. Protecto Rod goes to work immediately and reer installed in 5 seconds in lack and reer in a generous package of Leak Seal—a cold solder which not only seals radiator leaks from the inside, but also is an effective water pump lubricant.

Motor Trend Research Says:



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AIR CONDITIONING EXPERIENCES

Gentlemen:

Referring to your fair conditioning article in the September issue, perhaps my personal experience may be interesting.

Planning an 8300 mile motor trip through the Western States to Los Angeles and back, I bought a Cadillac equipped with air conditioning. While this equipment is tremendously expensive in Canada (\$974 versus slightly under \$600 in the U.S.) in my opinion it is worth every penny of it.

Your article emphasized the cooling and dehumidifying aspects of the unit, but you overlooked several things of tremendous importance: (1) The Quiet. To roll along at highway speeds of 70 to 80 mph with the windows rolled up tight and be able to play the radio exactly as you would in your living room at home is a real experience. One note of caution . . . it is so quiet that you are inclined to overdrive the highway simply because most of us drive a little by ear. Nevertheless, it prevents highway fatigue on a long trip. (2) Dust Free. It is amazing how clean you are at the end of a day's travel in hot, dusty country. Even if it is only 70° outside and you're approaching a stretch of gravel road, or a dusty detour, you can quickly close the windows, turn on the air conditioning system . . . and you can continue to breathe normally and stay clean. (3) Pollen Factor. This is extremely important to those with hay fever.

... Engine cooling is no problem, at least on Cadillacs. I did buy a long bristle brush to clean the insects from the air-conditioning radiator and the car radiator every second day.

We had only one unfortunate experience with this unit. A compressor shaft froze which resulted in loss of all Freon as well as the 525 viscosity oil contained in the compressor.

Another word of warning to prospective purchasers. Freon in its liquid state is extremely dangerous to the eyes, since it is so cold that it freezes the optic nerve.

W. E. Williams Toronto, Canada

MORE ON FIBERGLAS

Gentlemen:

In your August issue . . . you ran an article called "How to Work With Fiberglas." In this article, you referred to two books . I would appreciate it very much if you could send me information on where I could obtain them. I think MOTOR TREND is the best car magazine on the market. Keep up the good

> Monte M. Strand Hobart, Okla.

In answer to the many requests for information on the two books, here are the addresses of the publishers: Fiberglas Auto Construction Manual, Wilking Co., 1055 Lincoln Ave., Pasadena, Calif.; The 'Story of the Vibrin Plastic Car Body, Naugatuck Chemical, Naugatuck, Conn.-Editor.

CONTINENTAL FAN

Gentlemen:

Enclosed is a snapshot of my Lincoln. have long been a fan of the Continental and had a chance to buy a '40 Lincoln body for \$35. It wasn't the classical Continental but was nevertheless a very nice-looking car.

When I got it; it was minus engine, transmission, upholstery, and top-not to mention many smaller items. Luckily the body was in good condition. I have had it upholstered and painted Olds metallic Palm Green . . . the engine is a stock '48 Merc



with a '48 Ford transmission. I also acquired a Columbia rear end and added that. I have found that the engine is too small for so heavy a car so I hope to change to a larger type when I get home.

I would like to hear from anyone who owns a similar car.

> Pfc. Thomas M. Wilson U.S. 56136610 55 Military Police Company APO 301 c/o Postmaster San Francisco, Calif.

DYNAFLOW VS. HYDRA-MATIC

Undoubtedly everyone has heard, or has taken part in, a discussion of Hydra-Matic as opposed to the torque-converter type of transmission. Up to now, any attempt to compare the two types has been futile because of the many factors involved . . . With the unfortunate destruction of GM's Hydra-Matic plant, an ideal situation for comparing the two units has appeared. I (and many others, I'm sure) would appreciate it if you could test a Cadillac or Oldsmobile equipped with Dynaflow and publish the results . . .

> Edward T. Wong Minneapolis, Minn.

For a driving impression of a '53 Cadillac with Dynastow, see page 66. A complete discussion of automatic transmissions will be published in a forthcoming issue.-Editor.

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The Automatic Tune-Up Injector performs this cleansing and oiling job continuously. Every 100 miles, it meters a 1-oz. bulk shot of tune-up fluid into the carburetor. Mechanics agree this bulk shot, which does not vaporize and burn, is far more effective than ordinary "drip-type" oilers.



You've seen mechanics pour a full can of solvent-lubricant into the carburetor when tuning your car. These solvents work with the gasoline, dissolving the gummy deposits, and passing them out through the exhaust pipe. Immediately you notice the smoother performance and improved gas mileage.



Enjoy the thrill of your car running at peak efficiency. Cut engine wear, and equalize compression in all cylinders. With the "Automatic Mechanic" on the job, you'll get easier starting, and smoother cruising. Hills will melt away, and you'll make fewer stops for gas and oil.

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November 1953

Spotlight On Detroit FYI... NEW HUDSONS, I

By Walt Woron

DETROIT, MICHIGAN—As this issue of MOTOR TREND goes to press, the parade of new cars starts. Actually, it began with introduction of the '54 Hudsons at the Michigan State Fair here September 4-13. Nationwide public announcement did not come until days later. Hudsons have also been seen on haulaway trucks throughout this area, so locally, anyway, the public knows that . . .

THE NEW HUDSONS (as reported in last month's "Spotlight") have been restyled. Using the same body shell, a modified look has been achieved by lifting the front fenders, squaring off the hood, adopting the Jet-style grille (horizontal bars), heightening and extending the rear fenders to square them off so they (with the new extended taillight assembly) actually give a fin appearance, lifting and squaring off the rear deck, adding large chrome sashes (gravel guards) to the body sides (or rear fenders, depending on whether it's a two- or four-door) and using a one-piece windshield. These are not the only changes, for . . .

PERFORMANCEWISE, THE '54 HUDSONS have also been changed. The Hornet engine has been upped from 145 bhp to 160 on the standard models, through a redesigned combustion chamber and camshaft, higher compression (7.5 instead of 7.2). When Twin-H Power is added, horsepower jumps to 170. Horsepower is incidental in the Hornet, Hudson engineers ten us. Important feature is that the torque curve is flat from 30 to 80 mph, giving it that acceleration so vital when you're on the wrong side of the road. To help in controllability...

HUDSONS HAVE POWER STEERING, optional at extra cost on Hornets, Wasps, and Super Wasps, It's the direct action, linkage type and uses the same steering ratio and linkage as the standard center-point system. This means that if the power system should fail, no more effort would be required than for any normal system. When the steering wheel is turned two degrees, the power unit takes over. A spring resistance of four pounds should he!p provide "fee." and prevent "oversteering." We'll report on this later, as we will on Hudson's...

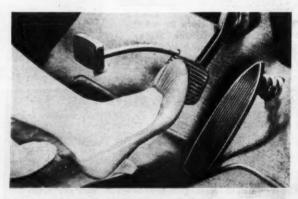


The new body lines initiated last spring by the Hudson Jet now appear in longer form on the luxurious Hornet for 1954



More room inside the trunk of the new Hudson Hornet and Wasps results from the new deck lid. Fenders, too, are new

NEW POWER BRAKE, optional on Hornets, Wasps and Super Wasps. It's a combined vacuum and hydraulic unit, using a pendulum-type foot pedal, located at the same level as the throttle. You can switch your foot easily from throttle to brake, leaving your heel on the floor. Seems to us this is one of the safest systems yet. If the power source fails, a reserve vacuum tank allows three power applications and a direct mechanical link-



A low, pendulum-type pedal operates Hudson's new vacuum-hydraulic power brakes. It's easy to pivot from gas to brake

SONS, DODGES, PLYMOUTHS...PACKARD BALBOA...U.S.--JAPAN CAR PACT



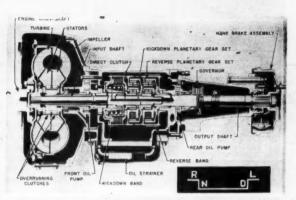
For 1954, Dodge introduces a new luxury series, the Royal, with its V-8 stepped up to 150 bhp. Here's the sport coupe

age operates the brakes hydraulically. Also, the hydraulic system has a reserve tank that always keeps the system filled. In looking over the new Hudsons further, we noted that the . . .

AIRSCOOPS ARE REAL SCOOPS now. Hudson engineers, who have opened up the former fake scoop on Hornets and Wasps, tell us that it now serves the purpose of ejecting hot air from under the hood after stopping,



Expensive Jacquard upholstery in new colors features the interiors of Dodge's compact luxury car, the Royal V-8 series



Newest of the new in fully automatic transmissions is Dodge's PowerFlite. The new quadrant lets you shift without looking

rather than providing cool air during running. This seems to make sense. Everyone has had his car boil after stopping it on a hot day. And speaking of airscoops . . .

THE NEW DODGE has a chrome-lined one on the front of its hood. But far more important is a powerplant change through increased compression ratio (up to 7.5 to 1 from 7 to 1) that gives the V-8 150 bhp. This more potent engine is on the new Royal (super deluxe) series and on the Coronet (which also comes with the Six). The 140 bhp V-8 will now be used on the Meadowbrook (short wheelbase) line, along with the more powerful Six (110 bhp, up from 103). To back up the hotter engines is new "full-time" power steering (driving impressions on page 66) and the . . .

NEW POWERFLITE AUTOMATIC TRANSMISSION, slightly modified from the Chrysler transmission (one less clutch plate) but otherwise identical. It consists of a torque converter (2.6 ratio) and a two-speed planetary gearbox, which combined give a 4.47 to 1 ratio overall. There's no clutch to fuss with and to make the transition from clutch driving to clutchless driving real easy, Dodge engineers have provided a shift quadrant like a conventional H-slot gearshift. On quadrant, letters read R-N-D-L. For reverse (R) from neutral you lift up the lever and push to the left. From neutral to low (L) you lift lever and push down to right. From neutral to high (D) spring tension pulls the lever forward and you push down to the right. Biggest advantage of the new quadrant is that you can shift without watching it. Stylewise . . .

DODGE BODIES REMAIN UNCHANGED. Grille has been simplified by substitution of the slotted horizontal bar with a smooth one-piece bar. Extended headlight rims have been added to the new Royal, distinguishing it from the Coronet. A new chrome spear that will give protection to the body side has been added to all models. New interior styling on the Royal series includes two-tone color combinations in Jacquard upholstery fabric, a rich-looking and durable material. We were happy to see the new dash treatment that simulates leather (yet is paint), giving the impression of a crash pad, but more important, eliminating glare normally attendant with high-gloss

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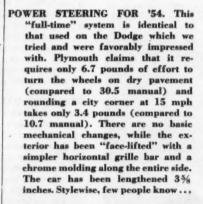
DETROIT GRILLE MFG., CO. 258 E. Vernor • Dept. MT • Detroit 1, Mich.

Spotlight on Detroit

(Continued from page 11)

paints. New interior treatments like this on the Dodge may be the start of a new trend, what with the . . .

NEW PLYMOUTHS coordinating interior color schemes with exterior colors, even to the extent of the horn button, headlining, and instrument panel. Also used are new fabrics, synthetics, and combinations of synthetics and natural. The deluxe models, the Belvedere series, offer only four basic colors, in two-tone combinations, color-keyed to the interiors. The other two series, the Savoy and Plaza (formerly Cambridge and Cranbrook), offer a wider selection of colors. It will be interesting to watch Plymouth sales figures to see how important an effect color-matching has, since this is the big news in Plymouth this year. It's the first time that stylists have been able to sell this idea to management. Other interior changes include a simulated-leather paint on the dash (as described for the Dodge) and more comfortable seats (because of horizontally mounted springs that supplement the normal coil springs). Other notable changes include . .



WHAT'S HAPPENING AT GENERAL Motors Styling Sections, because



Luxury and color abound in the interiors of '54 Plymouths. Horizontally mounted springs now supplement coils in seats

it's getting harder and harder to get past the "security guards" posted there. Chrysler, under the capable guidance of Chief Stylist Virgil Exner, is doing things that are "totally different from anything produced today." All we know about the '55 models (right down the line) is that they'll have wraparound windshields. News out of Ford stylewise is their sports car, which is described by those purportedly in the know as a "face-lifted" Corvette, it's so similar in design: It has a wraparound windshield, dropped doorline, Lincolntype taillights, same wheelbase, but is not as wide. And while Ford is working on its sports car . .

HUDSON IS SHOWING ITS ITALIA, a possible new version of the Jet in future years, at the Fourth International Motorama from October 26 through November 1 in Los Angeles (see page 21). Briefly commented on last month, we can now give you additional info. It's a closed, alaminum-bodied coupe, styled and built by Carrozzeria (coachbuilder) Touring (Milan, Italy). It's on a Jet chassis (Continued on page 67)

Pet project of stylist Ard Avakian of Ford is this Fiberglas roof overlay for his '53 Nash Statesman. If the metal roof were lifted, headroom would go up two inches

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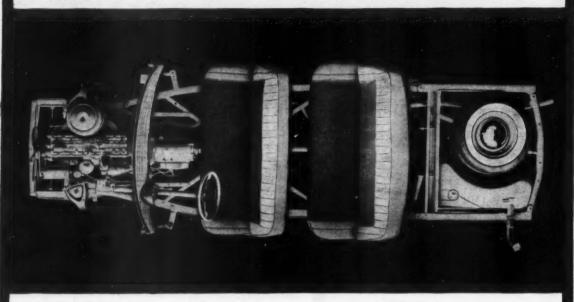
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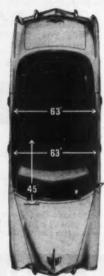
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HOW TO WINTERIZE YOUR CAR continued

but a tune-up can't help but improve some important components. If your engine "lopes" or sputters on warm-up, the bug is likely the automatic choke. A stuck choke valve can cost plenty of gas. (The automatic control unit itself is set at the factory and ordinarily won't require adjustment for the life of the car. Leave it alone if it isn't giving you a bad time.)

The proper degree of exhaust heat at the intake manifold (for fuel vaporization) is vital for decent warm-up, throttle response, and gas mileage in cold weather. Check the movement of the damper valve carefully. If it's sticking, lubricate the shaft with a mixture of graphite and kerosene (regular oil would oxidize and gum up). The fuel system shouldn't need attention from you other than possibly to clean any water out of the pump sediment bowl and maybe use a water-absorbing additive in the gas occasionally.

Cooling System. Don't get careless with this end of the deal, for sure. Water expands nine per cent in volume when it freezes—and the force can move mountains. Need I say more?

There are several suitable anti-freeze chemicals that can be mixed with water to bring the freezing point down anywhere you need it. The least expensive and most widely used is alcohol, either denatured grain type (ethanol) or wood alcohol (methanol). The chart (opposite) shows the proportion of alcohol by volume in water necessary for a safe freezing point. (For instance, if you expect a low temperature above, say, 10°, you

need a 30-70 mixture of denatured alcohol and water; if you cooling system holds 20 quarts, that's six quarts of alcohol and 14 of water.) The garage mechanic can quickly determine the mixture proportion by taking a specific gravity reading with a hydrometer. The one drawback with alcohol is that it's quite volatile, and you lose it fast through evaporation. If you do a lot of high-speed road driving it is hardly practical. Don't try to use "hotter" water thermostats with alky to increase the output of your heater, or you'll be in trouble; and always have the mixture checked once a week.

A better all-around anti-freeze, though considerably more costly than alcohol, is ethylene glycol. Its boiling point is 380°F in the pure state, and it won't evaporate even whe highly diluted with water. You can use a hotter thermostat with it. The chart also shows glycol-water mixture proportions

for a safe freezing point.

Practically all prepared anti-freeze mixes contain a rust inhibitor; in this case don't add any more. Too much of it will play hob with rubber hose connections. If you're using just pure alky in water, definitely use inhibitor. Always follow manufacturers' instructions for any given anti-freeze mix. Warning: Don't use the cheap mixes based on glucose, sugar, honey. calcium chloride, mineral oil, etc.; they're very apt to plug up and otherwise damage your cooling system.

When you've selected your anti-freeze, there are several things you can do to prepare the system itself for winter. I think a good cleaning and back-flush is in order once a year. This will not only protect against possible plugging and overheating, but will increase the efficiency of the heater. It's not

Photos by Jack Campbell



Your car's oil bath air cleaner will give maximum filtering efficiency during cold weather if cleaned and filled with 20W oil



After running a cooling system cleaner through the engine, remove all deposits with air pressure and a reverse flush



Inspect the exhaust system carefully. A new muffler is a cheap investment in maximum safety for you and your family



A minor tune-up can't help but improve cold weather starting power; be sure to check operation of manifold heat valve



Battery performance varies with temperature. Keep your battery fully charged, for a weak battery will freeze quickly



Shock absorbers affect steering and car stability, which must be perfect for winter driving. Replace any faulty components

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Your engine may be primed for cold-weather starts, but what if your car is nearly snowbound? Traction equipment is a must

much of a job; the mechanic puts a chemical in the water and runs the engine up to a high temperature to dissolve and break up deposits, then he removes them by back-flushing the whole cooling system (and heater) under pressure.

At the same time check carefully for any leaks. Anti-freeze solutions are less viscous than water and will sometimes leak through where water won't. An internal leak past a gasket into a cylinder is bad stuff with glycol; if there are any signs of leakage on the outside, retighten the head bolts. Extra grease will often stop a leak at the pump shaft. Check all hoses and connections, including the lines to the heater; also make sure the thermostats are working right.

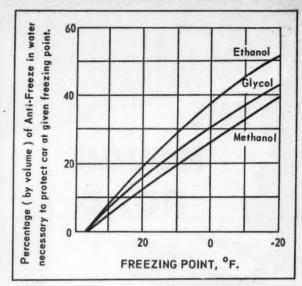
We all know that dead cold starts are rough on any engine. How about a big horse blanket kept in the garage to throw over the hood and grille on cold nights? Crazy? Try it and see!

Electrical System. A large share of auto service calls in the winter are due to a dead or frozen battery. You can lick the gremlin—if you understand that battery performance varies with temperature. For one thing, the current available for cranking the engine drops with the mercury; at zero it's less than half what it would be at 80°F. Furthermore, the freezing point of the electrolyte comes up as it discharges; a discharged battery will freeze at 20°.

This all adds up to the fact that you must keep your battery fully charged in cold weather. If the specific gravity of the electrolyte drops below 1.250, better recharge. Check this when you first prepare your car for winter and again every couple of weeks during the cold season (also see that electrolyte level is kept up). Check battery terminals for excessive corrosion, which can cause a bad voltage drop; clean with a wire brush or a strong soda solution, and coat with petroleum jelly to prevent further corrosion.

Chassis. Manufacturers don't generally specify seasonal changes in chassis lubricants any more. However, if much of your running is at very low temperature (below —ro°F) it's a good idea to use a lubricant one grade lighter in the transmission (if synchromesh) and rear axle. That means SAE 80 in most cases (90 is standard). Otherwise, chassis lubricants, brake fluid, automatic transmission oil, etc., need no special attention.

Body. One good winter is harder on a car's sheet metal and chrome than five summers. The excessive moisture, slush, slow



Your gas station attendant can determine quickly the proper anti-freeze mixture for your car. Warning: Don't use cheap mixes

evaporation, and road salt combine to corrode unprotected metal at an unbelievable rate. Many people think that calcium chloride is directly responsible for excessive body corrosion in winter—that it attacks the metal chemically. Not so; its major effect is merely to retard drying of the surface film, and corrosion is accelerated in the presence of moisture. This suggests a partial cure: Wash your car frequently in winter to remove the salt film, and whenever possible, park it in a dry sunny spot.

Then you can take steps to give the body a protective coating with good polish before winter sets in. Some commercial chrome-protector fluids are good, others no good. Use your own judgment—but at any rate cover the chrome with something, polish or otherwise. Consider undercoating when preparing for winter. It will not only protect the underbody from corrosion, but will help insulate the body.

Oh, yes; strictly for the sake of safety, you should check the condition of your exhaust system and windshield wipers as winter sets in. Defects in either could obviously get you in trouble in bad weather.

Traction. All our careful winterizing on the engine, chassis, and body will be worth about nothing if some morning after a 15 inch snowfall we can't plow the heap out of our driveway.

Here's the deal: For plowing through deep snow, some special snow-tread tires are superior to chains. Chains are better on shallow snow, packed snow, or ice. Chains have the advantage that you can easily slip them off when you get on the open highway; snow treads, on the other hand, give a somewhat noisier and harder ride on the bare road than conventional tires, and they really stand out only when snow is thickest and softest. So for the man who meets occasional poor traction conditions and does a lot of highway driving, chains are still the answer. For the low-mileage man on a back road who's up to his knees in snow half the time, you can't beat snow treads. A new snowtread tire will cost at least 10 per cent more than an equivalent standard tire, but you can get a recap job, sometimes with a new-tire guarantee, for little over half of that. Don't put off buying snow treads just because of the cost; it might prove to be poor economy. Meanwhile, I can't see any motorist in the northern belt of our country venturing out in cold weather without a shovel, a couple of burlap sacks, and maybe a pail of sand. Don't laugh; the nerves you save may be your own.

So get that bus of yours ready for winter—and don't let an early frost deck you in the first hand!



Mexico's world championship course beckons to Jean Behra's Gordini at Oaxaca

ONCE UPON A TIME, there was a family sedan, wafting southward along Ogden Avenue out of Chicago. The sun was bright, the sky was blue and smogless (he knew then he was dreaming), birds chirped, and the car made iron music in the peaceful morning.

What an engine! Clay Smith, augmented by Bill Stroppe, Henry Ford, and the entire mechanical staff of Mercedes-Benz (10,000 strong), had worked 24 hours a day for six months. The mammoth pistons glided in their polished cylinders like silk ribbons through a baby's hands. The delicate rustle of the valves was like the lap of little waves in a Tahitian lagoon. The languid air wafting back from the mighty fan carried the scent of gardenias.

Beside his left ear, a siren-sang.
"Whatsa matter, Mac? Lead in your shoes? If you can't drag more than 100

out of this sweet chariot, you'll have to pull off. Can't have you blocking traffic."

"Say, Officer, where is the traffic? I haven't seen a blessed car. What's become of that guy that runs me onto the shoulder on the blind curves?"

"We shot him."

"And the old ladies of both sexes? The gravel trucks, and the one-armed lovers?"

"Gone where the woodbine twineth . . . Listen, Bud, this road is yours. All this concrete cost more dough than there are ulcers in Hollywood, but today it's your private promenade. All rules off. Steer that perfect curve pattern, just like it was Memorial Day in Indianapolis. It's your road, man, yours!"

"Gosh, Officer, I never dreamed—you mean it's like this all the way down to Joliet?"

"This permit to a piston-pusher's paradise is valid clear to New Orleans, 2000



How are U.S. drivers received in Mexico? Ask Herschel McGriff, winner of 1951 race

miles more or less, if you and your car are men enough to last that long."

"And only me on the road?"

"Well, we did think we might pass out pieces of pavement to certain other deserving gentlemen—Ascari, Ruttman, Stevenson, a few guys like that."

"Well, just as long as they don't get in my way. But don't let's sit here blabbing! I'm liable to wake up before we get to Aurora."

While our hero still daydreams, let's move a few inches south on the map of North America, across the Rio Grande. There, a writer's idle fancy acquires local habitation and a name: Carrera Pan-Americana México, the Mexican Road Race.

Give and take a few miles on the distances, change Chicago to Tuxtla Gutierrez and New Orleans to Ciudad Juarez, and you have an impressionistic description of what it's like to drive in Mexico's great annual race.

Two thousand miles of open road. All paved. A tempting thing to most of us, for in our daily driving we are forced to go slower and slower in cars built to go faster and faster. There is also a little matter of \$100,000 in prize money, and a view of one of the most interesting countries on the globe. The date for the fourth running of the Pan-American: November 10 to 23.

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Now, how does the impossible become the accomplished fact, just by crossing a frontier? The answer, of course, is political. For a race from Chicago to New Orleans, the governments of the states would have to give permission to close the highway. So, presumably, would the Federal government. Just imagine the debates in Congress! If such a proposition ever got through Washington and the various state capitals, there would still be thousands of cities and towns and crossroads entitled to put in their two cents. Then would

come all the associations and lodges and clubs, and even if everyone else gave way, some solitary crusader would no doubt lie down in the highway and refuse to budge. Just to put the question is to answer it. You couldn't close off enough of U.S. 66 to stage an egg-and-spoon race.

Then how come it's done in Mexico? The Pan-American Race passes through 11 states and most of the country's larger cities. Few alternate routes are available. All motor traffic just stops. The area is put under what amounts to a military occupation. To what extent, we shall see.

Mexico is not a dictatorship. The President is chosen by popular election, along with a two-chamber congress. The Mexican constitution, modeled after that of the United States, provides for a federal union of states. Theoretically, each state must give permission for the race to pass through it, and perhaps each city also. I say perhaps, because in practice the issue simply doesn't arise.

Although the race is technically a private enterprise, each year the race committee has had to hold its breath waiting for a go-ahead from the President. A simple "no" from him, and it's all off. But once the President gives his permission, that settles it. He speaks for everybody.

It would take a long history lesson to explain why this is so. It doesn't mean the President is absolute. It doesn't mean Mexico is not a democracy. It does mean that, regardless of the form of government, there is a long tradition of centralism going back to Spanish colonial days; it also means that the Mexican, a rugged individualist in his personal life, shrugs his shoulders over the ways of government—politics is for politicians. Anyhow, Mexicans love their road race. It's exciting and, by the way, it's good for business.

Taking leave of politics, the participation of the government is still important in our story.

The first race, held in May 1950, was

government-inspired. Mexico was rightly proud of having completed its part of the Pan-American highway system. What more effective way of demonstrating that the highway was not only finished, but a truly modern high-speed thoroughfare, than by opening it with a race?

Serious talk began in 1949, encouraged by the three principal automobile associations of Mexico, before sponsorship fell to the Asociación Nacional Automovilística (ANA). As an affiliate of the International Automobile Federation (FIA), which sponsors most major international racing, ANA sanction was essential, and the association has continued to organize all the Pan-American Races.

There's no room here to go into all the delays and difficulties, wisdom and foolishness, that inevitably accompany a first effort of such magnitude. It was bound to be something of a mess. As Mr. Shakespeare (who, I feel, would have enjoyed the Pan-American) once observed, the age of miracles is probably past. But to quote a more recent bard, California Lincoln-Mercury dealer Bob Estes: "You should have seen the first year at Indianapolis!" (Not to mention the woes of such comparatively minor enterprises as Watkins Glen and Bridgehampton.)

Stateside rumors, always wild and woolly where the Mexican race is concerned, were an early problem. Mexican gasoline was no good, the highway wouldn't be finished, the rules were uncertain, the prize money (\$38,000) might not be paid, etc., etc. This epidemic was put under control when some racing people from the States (including Bob Estes and Johnny Mantz) came for a look-see. On returning home, they issued a joint statement endorsing the race. Mantz himself raced an Estes-sponsored Lincoln and became a popular hero.

One of the rumors was justified to an extent. Because Guatemala has no highway to meet Mexico's link in the Pan-



The skid marks show Estrada Menocal's car went straight off this curve. Why, nobody knows. The mystery of the cause is a much-discussed subject among Pan-Am veterans



A picture worth a thousand words. Mexico and the auto age meet on an isolated plain



A cross-section of Mexico forms a backdrop for John Fitch and the Mercedes. The nose mask protected his face from wind at speed

American, two-thirds of the final 170 miles from Tuxtla Gutierrez to the Guatemalan frontier at El Ocotal has never been paved. With the first race starting from Juarez in the north, the drivers found the last leg a nightmare of cracked rock. Winner Herschel McGriff disemboweled his Oldsmobile a thousand yards from the finish, and coasted across minus gas and oil. El Ocotal itself was just a few thatched huts, and it was a long, long trail back home.

Since the first race, the El Ocotal leg has been skipped and the race has gone from south to north, leaving finishing competitors from the States 2000 miles nearer home when it's all over.

As anyone knows who has traveled in Mexico, the principal highway menace is livestock. Cattle, sheep, goats, horses and burros think the pavement was laid just so they can enjoy the heat radiating off the concrete. The highway is unfenced and something extremely drastic was called for during the race to achieve that dream of the open road we've been talking about.

Race Director Antonio Cornejo, an energetic Stanford graduate of a prominent Mexico City family, called in the Army. All branches of the military down



Mexico's midnight oil reserve will be untouched this year because of impound rule

to the village militia level, aided by the police, established a 2000 mile cordon. Mounted patrols scoured the countryside for more than a mile on each side of the route. The day before the race was to pass, all farmers were required to tie up or pen their animals. On the day of the race, the highway was closed to all traffic. Crossroads were blockaded, city streets were cleared, and people whose houses fronted on the route were advised to stay indoors or watch the race from their roofs (nearly always flat in Mexico). Planes patrolled overhead to spot hazards that might escape the ground forces.

Essentially this same system has been in operation for each race. Some dangers, particularly at finish lines, have persisted. It seems to be impossible to convince a lot of people that crowding in on cars going 150 mph is comparable to strolling through an artillery barrage. But the overall success of the system is proved by the fact that the race is still being held. Maybe the age of miracles isn't past.

Despite the \$38,000 in prize money, the first race was essentially amateur in spirit. The rules were made deliberately loose. Cars were supposed to be stock. but anything with four wheels attached to some sort of engine was allowed to chug along. Anyone's maiden aunt could get right in there with Taruffi and Johnny Mantz, and did. Entries included nine women (a couple of them were grandmothers), a middle-aged man and wife from New York, and a white-haired romantic from Arizona, riding co-pilot with a Spanish-American war veteran she planned to marry after the race. It was all very charming and unlikely, and didn't happen again. The only woman to repeat was Jacqueline Evans, British-born Mexican movie actress and nightclub singer, who has been in all three races. She's the first one to sign up in the light sport class for the fourth race.

American an annual affair, it was obvious a more professional approach had to be taken. The FIA and the AAA Contest Board could not be expected to be so broad-minded twice in a row.

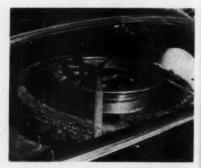
It turned out to be a good race, and worth repeating. The date was moved to autumn. There were five days of actual racing with a day's layover in Durango.

The late Antonio Cornejo stepped down as Director-General but remained a powerful support behind the scenes. A volatile young Spaniard, Enrique Martín Moreno, an ANA executive and Control Chief of the first race, took over. Martin Moreno has been Director-General and prime mover-and-shaker in all the Races since.

Driver licensing and a more detailed def-inition of "stock" were the first orders of business. On both of these jagged rocks. the second race scraped and threatened, at times, to sink.

There has never been any license problem for Mexican and European drivers. But in the U.S., the AAA and NASCAR (National Association of Stock Car Automobile Racing) were and are feuding. Under FIA rules for international competition. all U.S. drivers competing in an FIA-approved race must carry AAA-issued

(Continued on page 64)



Jack McAfee shredded this tire on a Fer-When it was decided to make the Pan- rari. New tire design may ease the problem

Twenty

Motor Trend

Colorful Galaxy

More unusual cars than ever before are featured at the Fourth Annual International Motorama

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The customs at Motorama will be second to none in inspiration and quality of finish. This '50 Studebaker is an example

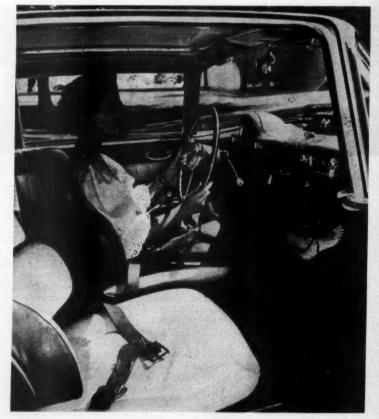


Packard's experimental Balboa hardtop, latest variation on that popular theme, offers freedom from snow, ice, and glare

THE MOST COLORFUL GALAXY of automobiles ever assembled in the United States? That's the Fourth Annual International Motorama. What kind of cars send chills up your spine? Detroit's lavish limited production cars? They'll be there, including Hudson's new Italia. What else do you like? America's own beautiful customs? The newest and finest creations in the sports car field? Wondrous foreign imports? Record-holding competition machines? You'll see them all, with Bonneville entries and the nation's greatest collection of hot rods! There'll be antiques, classics, and vintage cars galore.

The entire Fiberglas construction process will be demonstrated. A Fiberglas car will be assembled on the show floor. A new Woodill Wildfire (MOTOR TREND, August 1952) will go to the show's luckiest visitor as a door prize. The car is a replica of the one used by Danny Kaye in his new film, "Knock on Wood."

More dramatic in presentation than ever before, the '53 Motorama will run from October 26 through November 1 at Los Angeles' Pan-Pacific Auditorium.



Hudson's new Italia has an interior fairly bursting with innovations like twopiece seatbacks, safety belts, luggage holddown straps. doors cut into the roof

Its beauty of line and record-smashing performance make this new sports car a natural for enthusiasts and housewives alike . . .



IT'S REALLY THAT GOOD!

WHEN A CAR like the Austin Healey "100" comes along, when its maker publicizes it as a car "for the enthusiast who wants quality," and when an enthusiastic press lauds it in glowing terms, you begin to wonder, "Is it really that good?" We (MOTOR TREND Research) were doubly curious: We wondered not only if it could be that good, but, if so, why was it so comparatively reasonable? (Austin Motor Company Ltd., England, quotes a price of \$2985 FOB port of entry.)

To let us get the answer to these questions, the Southern California Austin representative turned over to us his personal car (then the only Austin Healey 100 on the Coast).

"A word of caution," Bob Botwinick noted. "This car's a pilot model. one of

BY WALT WORON

the two assembled in a big hurry for the International Motor Sports Show in New York earlier this year. I'd appreciate it if you'd keep that in mind, since it may have a few bugs that production cars won't." (That explains why we give our driving impressions and not a full-scale road test report. Providing sufficient reader interest warrants it, we will publish our own performance figures later.)

Most people at Trend Inc. had been anxiously awaiting their first look at the car. When we drove it into our parking lot, questions were tossed at us hot and heavy.

"Is this it? Looks even better than it does in its-pictures."

"How soon can you get one?"

"Can I take a ride?"

That was the immediate reaction. But now we'd like to put down various personal observations about the car. We're setting them down like this (each of us had a chance to drive the car a good number of miles over a three-day period) since a sports car must be evaluated in a light totally different from a stock car. Here are my notes:

It's fast, has lots of punch at any speed and in any gear, including high. Austin claims it will do from zero to 60 mph in 10.5 seconds, get through the quartermile in 18 seconds, hit 80 mph in 20 seconds and give a top speed (in racing trim, windshield down, tonneau covering the passenger's side. full bellypan) of 110

Twenty-two

Motor Trend

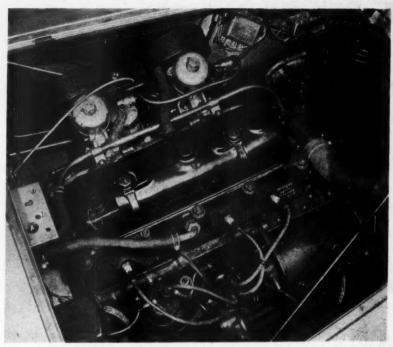
mph. The best possible demonstration of British conservatism in performance claims is the Austin Healey's record smashing at Bonneville in September: A modified model (8.5 to 1 compression ratio instead of the standard 7.5 to 1, higher valve lift, smooth tires) hit 142.6 mph, later averaged 123.75 mph for six hours and 122.9 for 12 hours, and broke sundry records for light (International Class D) cars. A stock equipped car averaged 104.3 mph for 24 hours.

At high speeds (70 and above) due partially to the extremely light all-aluminum body, there is some wind wander. Production models will be slightly heavier than the test car's 1900 pounds because steel fendersides and door panels, less susceptible to damage, will replace the aluminum ones. For a 90 inch wheelbase car, the ride is good, and it takes dips reasonably well.

Bucket seats are exceedingly comfortable for driver or passenger; the back of the seat is shaped to hold the passenger in during hard cornering. Steering wheel position is comfortable and you can rest your left arm on the doortop while driving. The column is adjustable. There's plenty of legroom.

Steering is not stiff (like that of an MG, for example) but it is much quicker (2½ turns lock to lock) than American stock cars. The "100" corners like a sports car should: When you're powering through a yery sharp or wet turn you can break the rear end loose, but you correct the wheel slightly and the car's back under control. Going through gentle to fairly sharp-radius turns at 45 to 55 mph, you won't normally drift. If you do, you feel confident about the car's ability to power out of it.

Neither the gearbox nor the engine is temperamental. You can treat both of them like those of an American car; you're not constantly shifting gears to rev the engine to its peak. The electrically operated overdrive (it has a toggle switch on the instrument panel) gives you virtually



Austin Healey uses long-stroke, ohv "four" that puts out 90 bhp. It gives good lowspeed torque, one of many reasons why the new car should succeed here in the U.S.

six speeds forward, any one of them instantly available.

And how do some of the other staff members feel about the Austin Healey "100"? Well, here's what normally unexcitable Jim Potter, our six-foot, one-inch, 200-pound managing editor says:

"It has looks, power, compactness, easy handling, and precision. Everything fits: doors, hood, deck lid. They gave a lot of attention to comfort details, such as the side curtains, the hollowed-out door panels, the sloping two-position windshield, the bucket-type seats, etc. My frame fits with plenty of legroom and space to maneuver controls. The gearshift, though di-

rectly opposite to American cars, is easy to get onto and also easy to manipulate.

"Of all the small cars that I've driven, the Austin Healey is tops. I like its size; I like its looks; I'm comfortable driving it."

How about our new Technical Editor, Dick van Osten, who has some trouble squeezing into tight spots?

"The '100' is light and short, making it easy for both the sports car enthusiast and



Gordon Benett (in cockpit) and Donald Healey at Bonneville with the Austin Healey that broke International Class D records

November 1953



The Austin Healey roars down the salt-floored track just before it established a new production car record: 142.6 mph

the housewife to drive. Its handling is good enough for even the most ardent driver.

"Visibility is good, and although the seating position is a little low for the average driver, I personally like it. When the top is up (and it's easy to handle) it's still easy to see out the back because of the large rear window.

"High cruising speed of the car appears to be around 80 mph in overdrive (3000 to 3500 rpm). The proved long-stroke A- 90 engine gives it good performance and dependability.

"There's very little or no wind blast for driver or passenger (my wife reports). I agree with her.

"Overall impression: It's elegant and sporty in appearance (an unusual combination in British design) and has good workmanship."

And what does our lanky (six-foot, twoinch) assistant managing editor, Pete Molson, have to say? "An extremely appealing little car that would get my dough if I were planning to get anything anywhere near its price class. It's the right size, a great pleasure to drive, has plenty of room for driver and passenger with the possibility of taking a third along for a very short haul." (The drive-shaft is well padded.)

"The combination of responsive steering, plenty of reserve power, and the best transmission setup I have tried yet is what makes it such fun.



Frankly a two-passenger car, it has room for one more on the padded driveshaft. Cockpit, controls show top design sense



There's room for luggage in this sports car. Gas filler, in side trunk, is artfully concealed but not too satisfactory

Twenty-four

Motor Trend



Walt Woron tests the first Austin Healey to reach the Coast. Docile handling on curves and straightaway impressed MT staff

"The instruments, upholstery, windshield and side curtain workmanship all show real care in design and construction. The car needs an outside door handle, though, especially with the top up. Why not a pushbutton at the top rear edge?"

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Another member of our Research Staff, Fred Bodley (who is average in height and weight) had this to say:

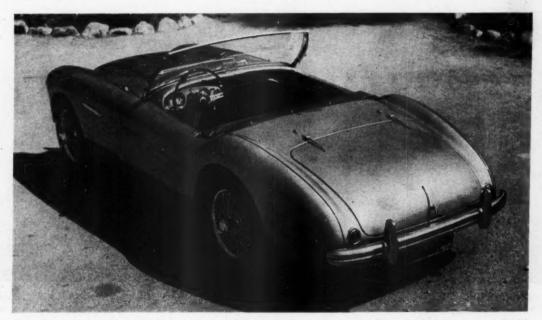
"Instrument panel placement is fairly good and there's a nice contrast in faces. Seats give good support to thighs; would like to see quicker adjustment for seats." (It is necessary to remove and re-locate two bolts to move the seat.) "Excellent storage room for such a small car. Steering is lightly loaded and fast. Takes turns quite flat. Handling is all you could ask for in a car of this class."

Photo Editor Jack Campbell, highly critical of cars, waxed enthusiastic:

"The Austin Healey '100' is a real automobile. It has power, excellent handling characteristics, comfort, speed, and beauty

of line. It's an example of a car that combines high performance with utility. Its road-holding qualities are astounding. It's about the greatest little car that I've ever had the pleasure of driving." (You'll have to take our word for it that Jack doesn't ordinarily talk that way.)

And so the one question of whether it can be that good is answered. We're still at a loss to explain why it sells for so little. But more power to Austin if they can hold the line. We like it at that price!



Straightforward in design, its front fenders visible at all times, the car combines the best features of British and U.S. design. It looks "stripped for action" even on a city boulevard, but you don't need a degree to drive it

November 1953

Twenty-five

QUIET-PANEL **BEATERS** at WORK

What's the secret of silence at this metal shaping shop? Strangely enough, it's a machine

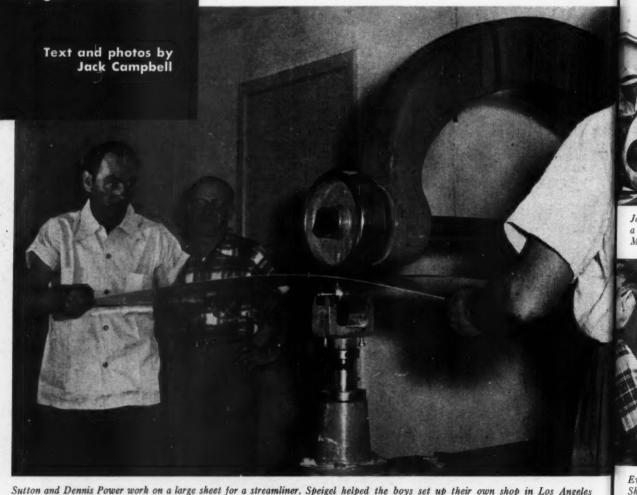
O PEOPLE WHO WORK in body shops, moments of quiet are few and far between. The crash of hammer on metal has become the background music to the American custom car scene. Therefore, to walk into the shop of Tack Sutton and Dennis Power and find it both quiet and in full production is an experience that may shake up the hardiest of individuals. The secret of the silence is, strangely enough, a machine.

In most American shops where large panels are hand formed, the air hammer is the only thing available to do the job. This is not only a noisy process, but the constant hammering fatigues the metal and makes it brittle. The machine, or more properly, tool, that Sutton and Power use is not only quiet, but it anneals the metal to the shape desired, and does not build up stresses and strains within the metal, as does hammering.

This tool, as well as its owners, has its

roots in England, and has been the mainstay of "tin bashers" and "panelbeaters" there for nearly 20 years. Why it has never found a place in U.S. body shops is a mystery. Perhaps the reason that the tool is relatively unknown in this country is that it takes a long time to learn to use it properly. Both Sutton and Power have been in the profession since they apprenticed in it at the age of 14. Since both are nearing 40 now, it can be assumed that they know a bit about the nature of

In aircraft and automotive shops this tool is indispensable. Looking like a large C-clamp mounted vertically on the floor, the unit has a free-turning wheel mounted in the upper jaw of the C, with its axle perpendicular to the back of the C. In the lower jaw, which is adjustable by means of a spiral gear from below, is a smaller. removable wheel. This wheel may be changed in size and shape according to the



Sutton and Dennis Power work on a large sheet for a streamliner. Speigel helped the boys set up their own shop in Los Angeles

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The operator places the metal between these wheels, brings the lower jaw up snug, and moves the metal back and forth until the correct shape is achieved. When he finishes the piece, it is so smooth that it has to be "roughed up" in order to take paint. Only the operator's skill limits the complexity of the curves possible in any size panel.

The men who control the magic of this machine have worked in many of the good shops in England. Sutton worked in the aircraft plant of Vickers Ltd., did much of the body panel work for the late Sir Malcolm Campbell's "Bluebird," and finally operated his own place, devoted to racing cars and specials.

During the war, Sutton met Power at Coventry, and they worked as a team until 1944, when their paths separated; Power went on his own with a body repair shop in Coventry, and Sutton was off to

Africa as an airline mechanic. Aside from having his own shop, Power has worked in the largest of the British body shops. First among these is the great Abbey Panel Works, which makes bodies for most of the well-known British cars.

Neither man knew where the other was, but one day Sutton (who had come to Los Angeles by way of Canada) walked into a shop and found Power working there. One thing led to another, and into the picture came Max Speigel, a man of vision and capital, who put the boys in a position to set up their own shop in the custom capital, Los Angeles.

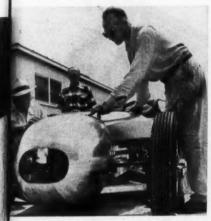
The honor of being the first body off the line goes to a trim little special built by George Beavis. Next in line is a streamliner for Bonneville, built for Chet Herbert. Also in the works are two special coupes built around Cadillac components, and a pair of Grand Prix Ferraris.

Keynote of this entire operation, some-

what unexpectedly, is economy. Sutton and Power want to put cars in the hands of people who can't afford the expense of the European body builders, but who want a car that's theirs alone.

Sutton says they can duplicate any body that's ever been built, or build anything from scratch, and this at a reasonable price.

They have already sent for another machine. When it comes, they will probably need more room. One thing that Sutton cannot understand (and that he is trying to do something about) is the current practice among big Detroit manufacturers of sending their special designing and building jobs to Italy. This, he thinks, is foolish, since there are many talented designers in this country who are capable of doing a fine job. Besides, he feels if special-bodied cars can be designed in this country, S and S Metal Shaping can jolly well build them!



Jack Sutton, left, and George Beavis fit a hood panel on the Beavis Special, while Max Speigel, S and S's "angel," looks on



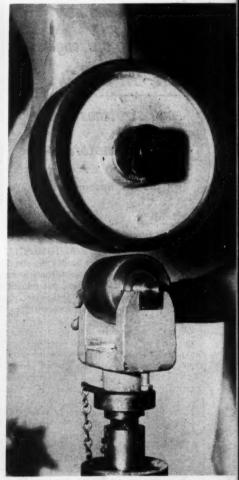
Removal of the lower roller, demonstrated by Jack Sutton, is a simple, quick job. Jaw is adjusted through spiral gearing



Everybody pitches in at S and S Metal Shop! Speigel, Power, and Sutton work on Chet Herbert's Bonneville streamliner

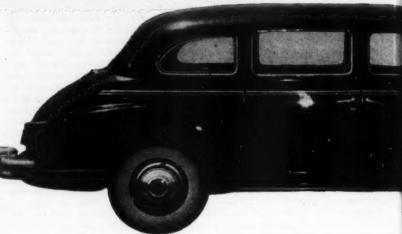


Dennis Power works on panel of compound curves. Note sheen of the metal; before it is painted, metal must be "roughed-up"



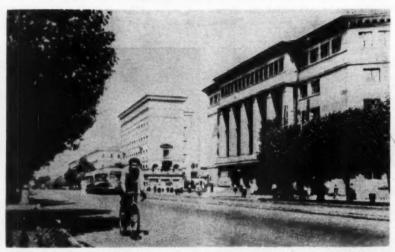
The "silent metalworker" with a flat roller in place. Different blocks are used to produce limitless, smooth panel contours

DETROIT on the DNIEPER



The Russians now
build five passenger
cars, but a rough
road stretches ahead
for their motorists

By the MT Research Staff



Most street scenes show trucks and busses, but this photo of a tranquil boulevard in Voronezh (about the size of Louisville, Ky.) has an utter absence of automobiles

OWNING A PRIVATE AUTOMOBILE is a privilege limited to a favored few among the 200 million people in the Soviet Union. And for those fortunate enough to buy a car, maintenance is a major, if not insurmountable, problem. This picture is not one drawn by anti-Soviet propagandists; rather, it is a situation pointed up frequently in the official Russian press.

When many workers buy private cars, the story rates the front page of the Communist Party newspaper Pravda, the government newspaper Izvestia, or the trade union publication Trud. Correspondents freely discuss the difficulties of keeping a car. Take, for example, a recent news item in Izvestia. Datelined Voroshilovgrad (an important manufacturing center of about 250,000 population) the story said:

"About 1500 working people in Voroshilovgrad Province have acquired their own automobiles, while still more have bought motorcycles. The number of car owners grows constantly.

"But the difficulty is that many car owners do not know how to do their own overhauling. They need skilled help. It is time to organize automobile clubs in the province center to instruct motor vehicle owners. But not even one such club exists in the province.

"Other problems also have not been solved. For example, Voroshilovgrad has no service station. It has no place for washing cars, and there is no vulcanizing shop.

"Some soviets [councils] in the province are trying to solve these problems, but they do not act resolutely. An automobile repair shop was opened in Kadiyevka. But what happened? The shop had neither supplies nor spare parts.

"Rumor has it that a repair shop will be opened in the city of Lisichansk, where there are many privately owned automobiles. But nothing has happened as yet."

Such conditions could well exist in outlying provinces without being typical of the entire country. But here is a plaintive letter to the editor of *Izvestia*, dated April 24, 1953. It is from M. Kalik, a Moscow bus driver:

"When my friends heard I had decided to buy an automobile, the first thing they asked was did I have a garage. I replied that as soon as I had the automobile I would find the garage. They smiled skentically.

"I bought a Moskvich [a small car] and gave the necessary papers to the Dzerzhinsky Borough Inter-Agency Commission. asking for seven square meters of land to build a garage. The commission rejected my request for failure to show a good reason.

"But what reason was required? What does a private car owner have to do to build a garage?

"I put this and other questions to Comrade Bodunkov, vice chairman of the Dzerzhinsky Soviet Executive Committee. "Bodunkov said he thought I had made a mistake in buying



Captured by U.S. forces in Korea, this ZIS-110 came to the U.S. in care of the late General Walton Walker. Shortly after, Trend Inc. bought it and displayed it in the 1951 Motorama. On the street, its immense size attracted motorists and pedestrians, but it looked so much like a Packard that few of them seemed to guess its true nationality. Equipped with electric windows and other luxury accessories, the limousine had powerful acceleration, especially for its nearly three tons. This 148 inch wheelbase model, larger of the two Soviet limousines, is now touring its adopted country

the car. When I asked why, he said that I didn't stop to think what the executive committee officials would do if half the people in the borough bought cars.

"Despite Comrade Bodunkov's emphatic statement, I was not convinced. I again petitioned the Inter-Agency Commission and was again rejected.

"I returned to Comrade Bodunkov and asked what I was to do—where could I keep my automobile? He said I shouldn't keep it, that I should sell it and save myself the worry of building a garage.

"Months have passed. I have not sold the car. Every day I am consumed with worry about where to leave the Moskvich during the night."

Bus driver Kalik was extremely fortunate to get a car in the first place. Comparatively few are on the public market, a large proportion being reserved for official use.

In 1950, the Soviet Union produced around 400,000 motor vehicles, but only about 100,000 were passenger cars; the rest were trucks. Under the present Five Year Plan, which ends in 1955, total motor vehicle output will increase 20 per cent. Passenger car production alone is slated to rise 49 per cent. Assuming fulfillment of the plan, Russia will be producing around 150,000 cars and 330,000 trucks annually in two more years. The Soviet Union's 1950 output of 100,000 cars and 300,000 trucks is far below U.S. production of 6,665,000 cars and 1,337,000 trucks in the same period.

The difficulty of acquiring a car in Russia is thus apparent from a purely mathematical standpoint. During 1950, the U.S.S.R. produced only one passenger automobile for each 2000 people. In the same year, the U.S. made one passenger car for each 22.5 people, not counting cars for export.

With only a little over one per cent as many cars available per capita as in the U.S., you might think that there would be a mad scramble over the small supply. This is not the case, because an automobile is beyond the means of the average Soviet worker. Take-home pay in the Soviet Union averages about \$125 monthly. The price of a Moskvich, the cheapest Russian passenger car, is around \$2000.

A recent cost-of-living survey in various countries gives these figures: An auto mechanic in the U.S. would have to work six months for enough money to buy a car. In Russia he would have to work 15 months, in England two years, in France two years and 10 weeks, and in Italy three years and five months.

A telephone operator in the United States works 33 weeks for enough money to buy a small car. Her Russian counterpart has to work two and a half years. In England the period is two years, in France two years and 47 weeks, and in Italy three years and 10 months.

Assuming that a Russian worker has the money to buy a car,

he is limited in choice to two models—the Moskvich and the Pobeda. The four-passenger Moskvich, first produced in 1946, is somewhat larger and more expensive than the American Crosley. Its 23 horsepower, four-cylinder engine has a 2.66 inch bore, a 3.05 inch stroke, and a compression ratio of 6.0:1. It gets about 37 miles per gallon, weighs 1856 pounds, and will hit for mole

The five-seater Pobeda, which looks like a pre-war Ford, has a four-cylinder, 49 bhp engine. It has a rated top speed of 68 mph and weighs 3000 pounds. The 129.3 cubic inch engine has a 3.23 inch bore, a 3.94 inch stroke, a compression ratio of 6.2:1, and turns 3600 rpm at maximum output. It covers about 21 miles on a gallon.

Three other Soviet automobiles are in production, but they are not available to private citizens. They are the ZIM, the ZIS-110, and the new GAZ-69.

The only car with modern styling in Russia today, the ZIM first appeared in 1949. The six-passenger luxury car has a bustle back and a six-cylinder, 90 bhp engine, weighs 3960 pounds, and has a top speed of 78 mph. Bore is 3.23 inches, stroke 4.33 inches and its compression ratio is 6.7:1. It has a conventional gearbox with a fluid coupling.

The seven-passenger, eight-cylinder ZIS-110, obviously derived from the 1941 Packard, is Russia's large and costly limousine. Powered by a 140 bhp engine, it has a maximum speed of



JACK CAMPBEL

The Pobeda, built to withstand hard use under rugged road conditions, is usually considered an original Russian design

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AN MT RESEARCH ROAD TEST REPORT



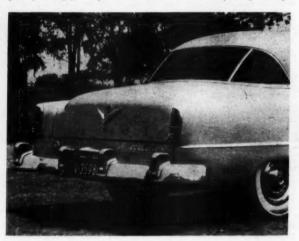
Styling changes for '53 include new parking lights, a third grille bar, and elimination of wide chrome plates on fenders



Dashboard spares no chrome, but padding eliminates glare completely. Large, one-piece windshield is result of body change



Well-supported deck lid, held open by overcenter springs, exposes one of the roomiest trunks of all cars tested this year



New Yorker's rear end was "decked" by replacing trunk handle with key-operated latch. Taillights incorporate backup lights

It HAS BEEN SAID that good things come in small packages, but here's a good thing that measures 21x by 76% by 62% inches—hardly a small package, but genuinely good in terms of materials, workmanship, and mechanics. For those who aren't up on their statistics, those measurements add up to the overall length, width, and height of the '53 Chrysler New Yorker Deluxe four-door sedan.

MT's test Chrysler was one car that we couldn't appraise easily from its general appearance, for the Chrysler hides its merits within a well-built utilita an body. It's a body that sticks to functional lines to achieve spaciousness.

Is there anything new and different about the '53 Chrysler New Yorker'? Although the New Yorker boasts an entirely new body, the major change is the car's The luxury car field is as hotly competitive as the lowest-priced group. One of the reasons is the Chrysler New Yorker, whose motto might be

QUALITY FIRST

Photos by Jack Campbell

handier size. The '52 New Yorker had a 131½-inch wheelbase, with an overall length of 213 inches. The '53 models are mounted on a 125½-inch wheelbase, and their overall length is two inches shorter. The '53 New Yorker uses the same chassis as the '52 Chrysler Saratoga which, along with the 131-inch New Yorker chassis, has

been dropped this year. The New Yorker and the less expensive, six-cylinder Windsor are now on the same wheelbase.

Is this big package hard to drive? Thanks to Chrysler's "full-time" power steering, the New Yorker handles as easily as a motorbike. Turning the steering wheel requires no effort at all, and makes parking a breeze if you're handy at maneuvering a large car in tight spaces. However, the lack of feel in the wheel can be disconcerting at times, for you can change the car's course with nothing more than the weight of your hand on the wheel; because of this, the "lazy" steering system demands constant attention.

The Chrysler's tremendous response to the gas pedal can be slightly harrowing in tight parking places if you're not used either to the available power, or the touch of the accelerator pedal; on this count, we're inclined to agree with those who say that the clutch pedal is not outdated, because it does allow more exact control at near-idle speeds. For those just leaving the ranks of the standard-shift cars, the Chrysler's clutch can be a blessing. People familiar with strictly automatic gearboxes may consider it an unnecessary evil.

Does the Chrysler have good roadability? The New Yorker's reaction to streetcar tracks was about average: There was some sidesway going in and out of the tracks. Hitting the soft shoulder of a suburban road, the Chrysler held its course easily; we felt no drag in the steering wheel. Body movement on rutted roads was better than on last year's Saratoga test car. The '52 car had more tendency to rock from side to side in ruts or car tracks.

Power steering gives positive control of the car in all tight corners, although the car's heavy lean-over and loud tire squeal can give the driver an uneasy feeling of cornering too fast. (We understand that the '54 Chrysler will be improved in this respect.) In normal driving, he will feel at ease. The rear end did not start to slide until we took the car into a really tight test curve at about 50 mph.

Does it ride well? The '53 Chrysler showed improvement in riding quality. It took normal highway dips and severe back-road chuckholes at all speeds up to 80 mph without ever bottoming or becoming air-

borne. There was no excessive oscillation (up and down movement); the New Yorker took even the worst dips in stride, with nothing more than one controlled bounce. At 40 mph on a paved test curve, heel-over was quite noticeable; the Chrysler hit its maximum point of lean at 45 mph.

Does the Chrysler give top-notch passenger comfort? Although the ride is a "floating" one in terms of up-and-down movement (this is not true on the '54 car), the New Yorker's passengers enjoy a comfortable, untiring ride. There was no vibration or road shock, and wind noise was nearly non-existent.

Is the New Yorker's interior up to its class standard? There's nothing about the Chrysler's interior that even hints of substandard quality or workmanship. The interior is finished with "nice-to-touch" wool fabric, conservative in color and harmonizing nicely with trim and exterior colors. Many of us thought the firm, chair-height seats the most comfortable in any car tested this year. Adding greatly to comfort (and luxury) are the pull-down center armrests in both front and back seats. The New Yorker's wide, comfortable front center armrest is a Chrysler exclusive; it should give those who satirize our so-called "living rooms on wheels" much conversation material, for it magnifies further the Chrysler's easy-chair interior theme.

Adding a special touch to an already luxurious interior are the handsome block-pattern door panels. The lower portions are trimmed in a durable plastic.

Door handles are good-quality chrome, positioned for easy use; MT's test car had electric window lifts, an optional luxury at \$134. The New Yorker's glove compartment, at the right side of the dashboard, is average size; ashtrays are mounted on the rear seat armrests, with one mounted low at the center of the dashboard to be shared by driver and front seat passengers.

Metal assist grips are mounted on the outer corners at the back of the front seat; they make it easier to get in and out of the car, but they are a possible collision hazard to rear seat passengers. This could be corrected by a simple change in design: Inset the grip in the seatback.

How safe is the Chrysler's interior? Chrysler designers deserve credit for installing a padded dashboard in a luxury car; they could have designed the dashboard with only appearance in mind, but instead they covered the dash panel with leatherlike padding. It is not only pleasing in appearance, but it is entirely functional, for it eliminates glare completely. The protective quality of the Chrysler's padded panel appears as good as any car tested; perhaps it isn't the best known to science, but it remains an important step toward safety.

The most objectionable protrusions on the panel are the heat and vent controls, placed knee-high on the dashboard at the right of the steering column. The padding could be brought down and around the lower edge of the panel, and with what Chrysler has already done in the way of interior safety, we look for this to happen soon. Clock and radio controls could be further recessed for top passenger safety.

Can the driver read the instruments easily? Are the controls marked clearly? The 53 Chrysler has well-marked controls and instruments, and all are within the driver's reach. The large, hooded instrument panel contains a large speedometer (one of the few with a convenient resettable trip odometer), with conventional-type ammeter, fuel, temperature, and oil pressure gauges mounted above and around the speedometer. The chrome figures mounted on a black background can be read at a glance, and the driver can read all the instruments on the high panel without taking his eyes far from the road. Instrument lighting and the radio lights are rheostatcontrolled; there are no lights for the (Continued on page 58)

THE CAR AT A GLANCE	FAIR	AVERAGE	G000	EXCELLENT
Standing start 1/4 mile 30-60 mph		x		×
BODY WORK				X
BRAKES Stopping distance average @ 30, 45, 60 mph			x	
EASE OF HANDLING			X	
FUEL ECONOMY Average @ 30, 45, 60 mph		x		
INTERIOR				X
RIDE		X		
RCADABILITY			X	
TOP SPEED				X



THIS ROAD TEST wraps up the 1953 series for MOTOR TREND, but it's certainly not the least important. The Buick Special, otherwise known as "Series 40," is one of the good reasons Buicks are the fourth most popular make in the U.S. according to national sales figures.

Our Research Staff was interested to discover why so many Americans shell out a few extra dollars above the cost of the lowest-priced cars for the Buick Special, and we believe we've found the answer.

Does Buick sell on name alone? No. Name is probably an aid to Buick sales. but it's not a positive factor in making up the prospect's mind. Although the car is well established in "name." its quality and dependability, coupled with an extensive maintenance and service organization, gives the Buick owner a feeling of security wherever he may go. Buick's severest critics will lash out at what they consider deficiencies in past models, but every manufacturer has had model years in which one or two details seem to be troublesome and this is not a valid criticism unless these self-appointed judges analyze their preferred car in the same state of mind.

Is the Special a "different" car? No, the car is definitely related to the pre-war models in most ways with the exception of the Dynaflow unit.

Its general appearance is similar to Buick's other current models but a little less gaudy. The impression of solid construction is reflected in its exterior styling. It is popularly considered a "heavy" car but it is only 400 to 500 pounds heavier than a four-door sedan in the three leading low-priced makes.

How often will I have to fill up my tank? The Special is now economically competi-

American as a Football Game

That's the solid, big-feeling Buick Special, whose owners keep coming back for more

Photos by Jack Campbell

tive with other makes in the low and middle price brackets. The latest Twin-Turbine Dynaflow has been improved greatly to eliminate the slippage at the beginning of an acceleration period, thus reducing fuel consumption over the earlier models when the car is driven rationally. An average of 16.2 mpg was obtained by MT Research for all fuel consumption tests. Considering that it's a 4000-pound car with a torque converter, we'd say the Buick Special is a pretty economical car!

Does the redesigned Dynaflow still feel like a slipping clutch? No. This peculiarity of torque converters is more psychological than actual. Several of the MT staff who drove the car said that the engine seemed to be turning between 2500 and 3000 rpm before the car began to move. But the Sun electric tachometer used in the road tests proved that our hearing was a bit oversensitive. As soon as the tachometer needle moved 100 rpm above the normal idle speed, so did the car. During the acceleration runs, a quick glance at the Perf-O-Meter showed constant accel-

eration within the normal range of driving speeds. The basic reason for the "slipping" sensation in the Special is that the Dynaflow unit could use a little more horsepower to turn it.

The Buick Special is a fairly good-sized car compared to its sales competitors; is it hard to handle? This nas to be a "ves" and "no" answer. On the highway, it's lost all of its mushiness and wander noticeable in some earlier versions. Tire squeal during fast cornering (including 45-degree turns across streetcar tracks) is probably at a new low for General Motors cars.

But . . . when it comes to narrowstreet, slow-speed, and parking operations, the Special doesn't rate so high. If you drive in downtown Boston or your wife tries to park in front of her favorite supermarket, you may find the car a little hard to handle in tight quarters. The five and a quarter turns lock to lock will keep you pretty busy in the steering department. Power steering would be a great aid to the Special owner whose greatest percentage of driving is in crowded areas.

ACCELERATION Standing start 1/4 mile 30-60 mph	FAIR	XX AVERAGE	G000	EXCELLENT
BODY WORK			X	
BRAKES Stopping distance average @ 30, 45, 60 mph		-		x
EASE OF HANDLING	100	X		
FUEL ECONOMY Average @ 30, 45, 60 mph			x	
INTERIOR		X		
RIDE			X	
ROADABILITY		X		
TOP SPEED			X	



If the car is "big" can I stop it easily? Yes. The brakes on the Buick were excellent. The average stopping distance for our three checking speeds (30, 45, and 60 mph) was the third best of all the cars tested by MT Research in 1953. The test car stopped smoothly and in a straight line even with the wheels locked. Required pedal pressure was about average and the front brakes locked equally before the rear. This is a desirable quality in a heavily loaded passenger car. Buick should be able to match its brakes against any other U.S. manufacturer with pride.

Would my Buick Special be a comfortable car? Yes. This is probably one of its greatest sales points. The Special is a "big" car at a reasonable price; its makers emphasize this with a soft ride and a pleasant interior.

The suspension system gives a cushioned ride that is further softened by foam-rubber padding on the seats. The front seat is better padded than the rear, but after all, the majority of passengers ride in the front seat, with only an occasional "full house" riding out to Aunt Harriet's for Thanksgiving.

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The driving position is comfortable but the short-waisted driver may complain that the steering wheel is too high for him (or her)

Interior appointments, including upholstery, are average with the exception that the car has two ashtrays on the instrument panel, a detail often overlooked but much appreciated by the driver-smoker.

Armrests are well positioned for both driver and passenger. Legroom is adequate.

How does the Special perform? It's neither a bomb nor a sloth. We feel that it does all the purchaser of the Special expects it to do. Acceleration won't flip you into the rear seat nor will it leave you staring at a green light wondering where everybody went. Although the Dynaflow unit is not provided with a kick-down arrangement and the Special is not a fast-accelerating car, the characteristic of steady acceleration does a lot to prevent nervous breakdowns in the face of an oncoming Greyhound bus.

Extreme demands on performance from the Special create more noise than we think is necessary. Engine noise is fairly high during foot-on-the-floor acceleration.

Would my Special be expensive to mainrain? No. Certain replacement parts may be a little higher than for lower-priced cars, but this is quite a lot more automobile. Labor is not too high either, as most of the engine parts are easily accessible.

The Special falls into a rather unusual category in respect to maintenance. Repeating our impression of the car as a big package at a low price, it must be pointed out that the car is purchased by people who demand just that. As a general rule, these people are after comfort above all



Because of its convenience and ease of operation (features appreciated especially by the fair sex), Buick's step-on parking brake draws much praise from MT Research



A close look shows Special's rear-end trim differs from other Buicks only by absence of "V" on deck lid emblem. Bulbous back is a true indication of the trunk's capacity

else and do not pound their cars with drag races away from every signal or with extended cross-country trips at top speed. These two items have a definite effect on maintenance, so, as long as the bulk of Special owners fit this description, it will remain an unusually trouble-free car.

Does the car have any unusual features? Yes. In addition to those previously mentioned, Buick's emergency brake system is different, and, in our opinion, the best. You set the parking brake merely by pressing a small foot pedal to the left of the steering column. To release it, a slight pull on a handle just below the instrument panel is all that's necessary.

The test car deserves a special comment on something unusual in most of the cars offered on today's showroom floors: everything fitted! The doors, hood, and trunk lid were all equidistant from the body panels around the edges with little gap between. Even the chrome and stainless steel trim was properly located and didn't look like bits from a construction kit.

That's all very well, but is the Special a good buy? Yes, there's no guesswork about buying one. Trade-in value of this series has been high for many years. Buick has another feature that figures very high among the reasons for its unusually loyal group of owners: It keeps its youth well beyond those first few happy months of ownership that any new car will give. If it has what you want, you needn't hesitate. (For The Story in Figures, see page 56)

TRAVEL





Indian cargador is still his own best van

Waterfalls hide huge limestone caves at tropical swimming hole near Cuernavaca



Thirty-four



Dominating Mexico City's central plaza is the national cathedral. A blend of past and present, church sits astride Aztec pyramid that preceded it

i Venga a México!

Friendly people, exotic scenery, good food and beds promise a fair wind south for your driving in Mexico

Text and Photos by Don Pope

Motor Trend



Some village streets are a little less than boulevards. You will be driving in a more leisurely civilization than ours

MEXICO IS MANY THINGS to many people. Some love it beyond all reason, others dislike it as thoroughly. But whatever it may be, Mexico is not dull. And of the ways of getting to and around the country, the automobile is by all odds the most satisfactory.

You are not going to get any guff from me featuring the words "quaint," "picturesque," or "exotic." Let's remember we're talking about a country, not a tearoom. The Mexican people have had it tough; most still do. A lot of what pleases the traveler as quaint is evidence to the Mexican of poverty and backwardness. We've forgotten all about our war with Mexico, when we annexed about a third of Mexico's territory. We forget that Mexicans are still humiliated in parts of our country by a color line. No Mexican has forgotten. As a representative of the "Gringo," you will often find yourself resented and even hated, just as a Damyankee is resented in the Deep South.

If you show the ordinary good manners and friendliness expected of a guest anywhere, you will usually find yourself treated in kind. Most travelers get along fine. Just remember you are in the other guy's house, and don't make cracks about the furniture. Airing your opinions in English, even in the most remote places, is no guarantee you won't be understood.

How to get there. I'm going to assume that you are traveling by car. That's the best way, if you can manage it. I'm also assuming a trip that reaches at least as far as Mexico City. Paved roads in general are about up to the U. S. average: adequate, that is.

There are two branches of the Inter-American highway system, which meet at Mexico City. Eastern point of entry is at Laredo, across from its Texas namesake. The faster central highway (route of the Mexican Road Race, page 18) begins at Juarez, across the Rio Grande from El Paso. Either



El Tajin pyramid, built by the Totonac Indians in Veracruz, has shallow niches for idols. Behind is an unexcavated ruin

Near the pyramid above stands this heroic figure, a jungle reminder of a culture that thrived long before automobiles



route is satisfactory, but if you live more or less in the middle, note that the Laredo road is shorter and spectacularly scenic. It has fabulous mountains, tropical jungles, timeless Indian life, plus a highway that is showing wear but is a notable piece of engineering.

From El Paso you can drive faster, the road is newer and better surfaced, you see a lot of varied country, hotel facilities are better and cheaper. Other things equal, my own choice would be the eastern road going, the central returning.

What it costs. Like most every other country, Mexico has suffered bad inflation. For those earning pesos, the cost of living is high. For anyone with dollars, however, a favorable rate of exchange (eight pesos, 58 centavos for a dollar as this is written) makes for one of the best travel bargains in the world.

Not that you can't spend plenty. Increasingly, prices to tourists are being raised to take up the exchange slack and I've heard people claim it cost them as much to travel in Mexico as it did in the U.S. Either they are remembering a pre-inflation trip in the U.S., or else they used second or third class accommodations at home and are going superdeluxe in Mexico. It depends a lot on what you buy. Im-

Thirty-six

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Do Yo trav onli go eler che bra Bar kee ported stuff, particularly American canned food, is expensive. If you want everything just like staying home, you'll have to pay for it. But plenty of American families in Mexico live well for \$200 and less a month.

Gasoline (regular) is about 20 cents a gallon. Oil is around 30 cents a quart. Parts cost more, but labor charges in garages are much lower. You'll be on the safe side figuring cost of

operating your car as the same.

There are no currency complications, such as in Europe. Dollars and pesos are interchangeable without restriction. You can buy pesos at the border, in any bank, and at some travel agencies. Many business places will accept dollars at only a few centavos off the official rate. To get the full rate, go to a bank or government exchange office. American traveler's checks are accepted. You can buy Mexican traveler's checks. Money can be sent to you in the large cities through branches of American banks (for instance, the National City Bank of New York). For details, ask your own bank. Try to keep supplied with change (cambio). (Continued on page 72.)

"See the mummies, Mister?" Preserved by the dry air, they greet you in a grisly reception line at Marfil's cemetery



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The capital has tapped the Lerma River for its water supply, and Indian reed-gatherers may shortly be left high and dry



One thing your automatic washer can't give you is the sort of social washday that hard-working Mexican women enjoy



Pulque, the poor man's escape valve, creates driving hazards like this. Rocks had to be moved to pass this roadblock

Thirty-seven



do it yourself!

EXCERPTS FROM THE TREND BOOK, CUSTOM CARS: 1954 ANNUAL

Text and photos by Robert Lee Behme



Even if you own a complete mechanic's tool kit, you'll need some special customizing tools. Shown here are various tools used in customizing; most of the professional shops have these tools in both hand and power units. You do not need this complete selection unless you undertake extensive customizing. In the picture above, you'll see various hammers and metal blocks (called "dollies") for reshaping body panels. Each hammer and each dolly has a specific use, and you are bound to find the combination that fits your needs. A power grinder (which can be rented) with an assortment of grit discs is indispensable, as are the hand files (left to right, with handles: shell, flat, and curved types). Leading equipment includes solder flux, paddles (in various contours), beeswax, and torch tips; goggles are a must

Long on ideas but short of money? If you can handle simple tools, you can dechrome your car, french the headlights or install an automatic deck latch.

WHAT KIND OF CAR are you driving? Whether it's showroomnew or a clean postwar job, chances are you've thought of great improvements that some well executed customizing could bring about. Customizing can be expensive, so perhaps you let the dream fade away; but did you ever think of doing the job in your own garage?

Customizing has to be fun. It involves a lot of really hard work, and at the end of the project your muscles are going to ache — but if it doesn't seem like fun, chances are it won't turn out right. Each step needs real attention; that means taking lots of time, as well as plenty of painstaking and precise measurements.

Every bit as important as enjoyment is the use of proper tools. The only tools that you must have and can't substitute are the welding torch and the spray gun. You can rent either one when you need it. It's not necessary or even smart to buy a lot of tools unless you plan to do a lot of metalworking. You may want to rent some of the more expensive ones, and you'll be amazed at the number of different jobs that can be handled with a few well chosen tools.

Before you begin, take enough time to plan your way thoroughly. No matter how simple the job may seem, you can run into nasty surprises if you fail to plan each step. When working with metal, it's mighty hard to erase a mistake like cutting too much metal from a panel, or welding at the wrong spot. A mistake can mean hours of cover-up work, so plan all your jobs.

The projects shown here were taken from some of the most popular customizing projects in the latest Trend Book, Custom Cars: 1954 Annual. You can do any of them at home without getting involved in major structural changes.

DECHROMING IS SYNONYMOUS with conservative customizing. The majority of today's customs come from the body shops leaving their chrome behind them — but only after the most thoughtful consideration. If you decide to dechrome your car, plan removal of each strip; estimate just what the removal will do to the design structure of the body. It may look wider, longer, or more squat. Whatever is decided, dechroming is an easy project; but before starting, practice using the torch — a little practice can save much patchwork.

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After considering the effect of removing a chrome strip, George Barris makes the first alteration to a custom-to-be. Strips are usually fastened with button snaps, metal screws, or nuts and bolts.

2 Because brazing is (for all practical purposes) like soldering, you must countersink the holes to present a larger surface to the brazing rod; with this method, the metal bond will be positive.

When brazing, keep the metal surrounding the hole deep red in color; then the brass will flow smoothly. But if you apply too much heat in one spot, the overheated metal will stretch and warp.

A Rather than build up low spots with a welding rod, it is better to hammer them to the proper contour. A dolly, held on the outside, checks the progress of the picking hammer used on the inside.

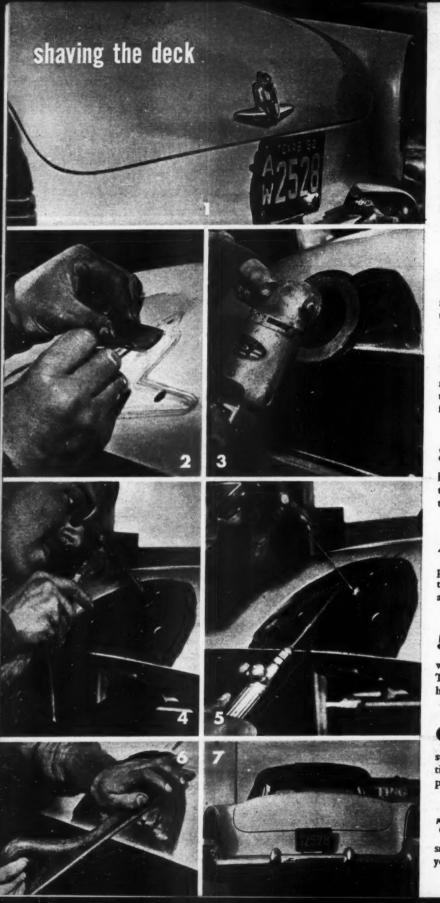
The file marks the higher contours and outlines low spots; at the same time, the file gives the metal a practically finished smoothing, leaving it ready for final pre-sanding and pre-painting steps.

The grinder, used as a rotary sander, may be tried in the finishing stages. Always take care to avoid gouging into the smooth contour. A grinder is usually best to prepare the metal for brazing.

When the contour is perfect, prepare the panel for primer by smoothing the edge of the existing paint into an invisible line; you can do this feathering by sanding the surface evenly and carefully.

Before applying a primer coat, cover the area completely with metal cleaner. Let the metal preparation set for a few seconds, then wipe the metal clean; a primer coat will keep it from rusting.





REMOVING REAR DECK handles and latches is one of the simplest home customizing jobs. When the deck is shaved, the common procedure is to install a solenoid switch or a cable-operated opening device; while these are popular installations, a third choice — a simple, flush key mounting — can substitute for the more expensive methods. Whatever installation you choose, the resulting clean exterior lines will be well worth the little effort involved. The entire job should take only a couple of hours' time and shouldn't cost too much.

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- This is how a Lincoln rear deck looked before George Barris started the rear deck "cleanup campaign." Only one unit had to come off the Lincoln's lid.
- The emblem, usually fastened with two or three screws, is easy to remove. Here, metal of the same gauge as the deck lid is marked for use as a plug to fill a hole. Small holes will be brazed.
- After you cut the plug, grind the trunk lid carefully to prepare for brazing. The surface must be cleaned thoroughly to insure a positive bond between deck lid and brazing rod material.
- After smaller holes have been countersunk for brazing, tap the pre-cut plug into horizontal alignment and then tack it into position. The small holes are then ready to be filled by brazing.
- Tack the metal filler plug around its perimeter to give a snug fit before welding it permanently into position. This usually calls for an extra man to hold the plug while it is being tacked.
- After the holes are filled in to a desired contour, a file will bring the surface to nearly finished state. The entire area is first feather-edged with sandpaper, then cleaned ready for painting.
- 7 The emblem and lock have been removed, and the holes filled in. A smooth paint job is the final touch and you can be proud of a chrome-free deck.

Motor Trend

THE INSTALLATION of an electrically operated trunk latch is generally thought of as an end to one particular problem — that of giving a chromeless, modern touch to a custom car; however, the automatic deck lid opener does more than that, for it discourages theft, it means you'll have no keys to remember (or forget), and it eliminates any problem you've ever encountered with a keyopening or handle-operated trunk latch. There's just one catch — you have to remember where you've placed the small button on your car's dashboard!

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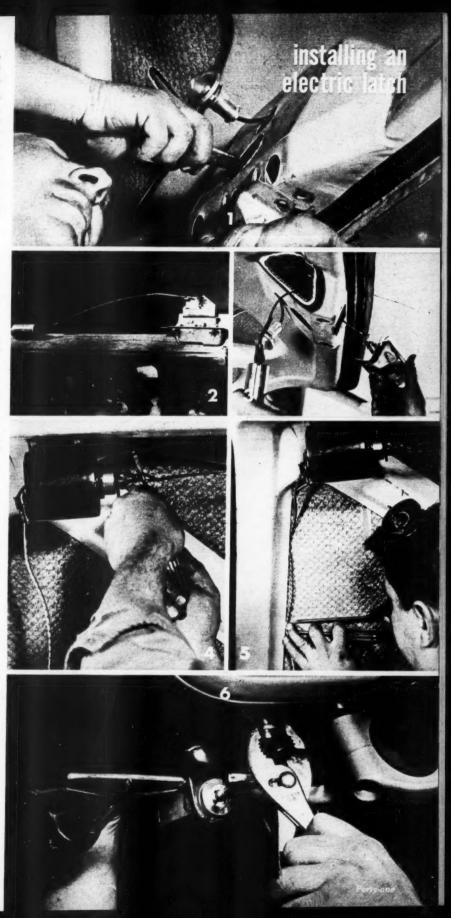
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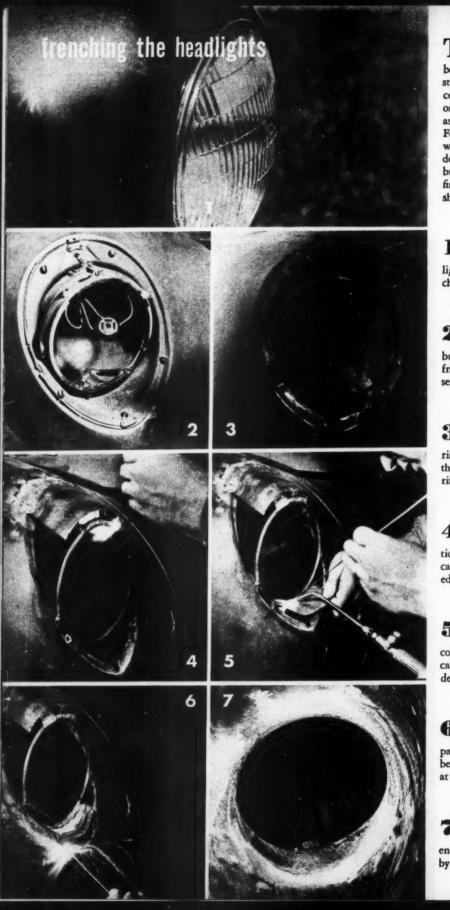
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- The original trunk latch normally fastens to the deck lid in one of two ways: either through a nut threaded onto the back of the lock's tumbler shaft, or with metal screws which fasten through a plate into the lid. Remove the whole unit.
- When you remove the trunk latch, fasten the plunger cable from the solenoid to the latch; in this case, the solenoid will be mounted under the deck lid in a straight-line position from the deck latch, the easiest installation method.
- The deck latch is reinstalled after the plunger has been fastened to the trunk latch. If the installation calls for a bend in the wire, you must use covered wire cable. In a straight-line setup like this, uncovered wire cable does nicely.
- Secure the solenoid to the deck lid with metal screws. When it is installed, set a stop in a position which will permit the latch to close completely, yet allow the plunger enough freedom to react properly when solenoid is activated.
- The solenoid is now ready for wiring; tuck the wire in neatly at the trunk, and fasten it under the door base strip to keep passengers from stepping on it or tripping over it. For a professional-type job, keep the wire concealed.
- If there isn't a small hole under the dash, you can use a small hand drill to make the necessary hole; the button is easily installed with wrench and pliers. Popular solenoids are Delco-Remy, and those made for various Chrysler products.





THERE ARE ALMOST as many kinds of frenched headlights as there must be of Frenchmen. There are flush rim styles, "natural" styles, inset styles, recessed styles, and so on, ad infinitum. The one shown here is the original method, as developed for use on the pre-war. Fords. It is applied to late model cars with slight modifications. Many different designs have grown out of the original, but of course the use of lead governs the final contours. The frenching method should emphasize the stock contours.

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This flush mounting is one of the more popular designs, for the headlight can be removed very easily. The change does not distort the fender line.

When you remove the headlight rim and lighting unit use the old light bucket as a guide to the size of the frenching ring, then replace it with sealed-beams when the job is finished.

Place the light bucket back in the fender in a loose position; make a ring that is the same size as the light rim, then attach three welding rods to the ring. Tack the welding rods to fender.

A Next, the fender must be extended out to the new light position. A section of heavy gauge metal, shaped to carry out the fender contour, is cut, formed, and welded to the top of the fender.

After the general contours of the top are welded securely, form the bottom contour in a similar manner. In this case, plans call for a drop from the fender to the light; use an upright strip.

Don't try to "stretch" the lead. Build up changes in contour with small patches of metal; these filler pieces should be welded into their proper positions one at a time, till the basic contours are done.

Weld all filler pieces into position, then apply lead over the metal till entire area is smooth and even. Finish up by grinding and filing, then prime.

Motor Trend

ONE OF THE MOST USEFUI, and most used, of the basic customizing techniques is that of applying lead solder. It's a simple process, and a couple of practice sessions should make you a capable worker. Lead is used in finishing contours when other methods are impractical. It has never been intended as a substitute for good workmanship, but it can be used in spots where hammer welding or metal fabrication can be costly. Use either tinning compound or the lead itself to make the initial bond to the metal.

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Metal surface should be cleaned thoroughly with a power grinder, small hand drill with grinding disc attached, or sharp hand file. Use a wire brush until the metal glistens. This is important, for solder will not adhere to dirty metal.

2 Application of solder-flux etch will give the metal an adhesive quality. Apply it and allow it to etch for a few moments before wiping off. When you remove it, any scale left on the surface from welding will come along with it.

After you have fluxed the area you can apply a tinning layer of lead solder. Heat the metal surface until it is hot enough to melt the lead. Wipe this layer very thin with a rag, for it is used only as a bond for the full layer to follow.

4 When the lead has melted onto the surface, keep it in a semi-fluid state with the torch. Dip a paddle in either beeswax or oil for lubrication, and paddle the lead to the correct contour. Build the leaded area higher than the final contour.

Moving in a direction which allows the file to follow the natural contour of the area, file the high spots down first. Blend the edge of the lead to produce a smooth, invisible joint while shaping the contour. Avoid cutting too much lead.

Glean the entire surface with a reliable metal-cleaning preparation. You must use prep on the bare metal, or the final lacquer or enamel finish will not adhere to the surface. Prime the area immediately. If it rusts, clean it again.

applying lead solder

November 1953

The Saga of Spohn

After a career of building bodies for a "German Rolls-Royce" and working for the Wehrmacht, Germany's Number One coachbuilder now designs custom cars for — of all people — U.S. soldiers

By Bob Polk and Steve Eisner

THE LITTLE BAVARIAN VILLAGE of Ravensburg pays no attention to radically designed automobiles. Cars may have nine wheels, two hoods, or a choir of eight headlights, but the local citizens give them only a cursory glance. For over 30 years they have been the audience at a nearly continuous preview of the fantastic auto bodies that periodically spring to life at Spohn and Company.

Formed originally in the early Twenties, the company captured the imagination of European automobile circles with its bodies for such makes as Bugatti, Mercedes-Benz, Steyr, and Maybach. The Maybach people were so impressed with Spohn's work that, as the Thirties dawned, they designated the small works as the official Karosseriebauer for their zeppelin-engined goliaths. (That was no inspired advertising talk, either. In its Freidrichshafen plant, Maybach Motorenwerke built the actual engines that powered the airships. Adapting the aluminum V-12 that guaranteed 230 horsepower was not too tough a project. Sometimes called "German Rolls-Royces," the cars sold for \$20,000 up.)

One day in 1931, Hermann Spohn arose from his drawing

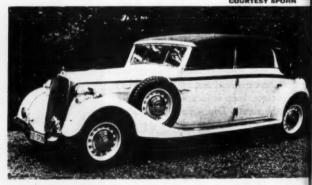
Spobn's first halting attempts at streamlining (1931) were nonetheless awesome because of the sheer hulk of the Maybach chassis. This "boxcar" had an aluminum aircraft engine



Having successfully overcome some growing pains, Spohn went still further in streamlining the Maybach for 1936. From the rear, the sedan looks like Pierce's famed "Silver Arrow"



More acceptable to the luxury car buyer of the early Thirties was this giant convertible sedan. Nearly perfect balance was the chief characteristic of its 230 horsepower V-12



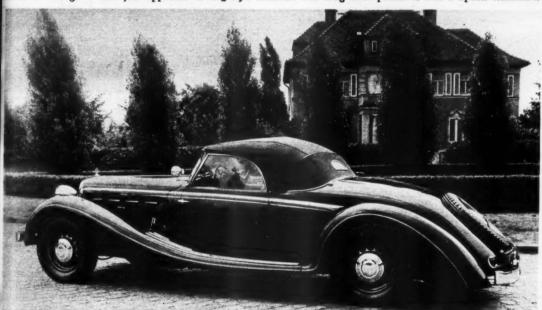
This jaunty close-coupled coupe has the air of a reversed postwar Studebaker. Top-of-bood louvers, clean front end, swinging windshield, and quarter-window panes were unusual



From



This 1938 standard-type Maybach challenges you to find a square centimeter of surface, inside or out, that isn't finished as though it had just appeared in Tiffany's window. The long door pocket is still a Spohn trademark (page 49)



From the same era as the car above, this conservatively streamlined Maybach convertible was for personal use. The occasional extra couple sat back with the semi-sunken spare and neat trunk arms that swung out in rear

November 1953

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Forty-five



BOB POLK

This is a typical scene at the Ravensburg plant these days. Here Lieutenant H. G. Luiscombe Jr. discusses plans for his 1952 Lincoln. At right is Josef Eiwanger Jr. with swatches of fabric, color samples, and sketches of the car's new look

board with the plans for a car that was to revolutionize the art of coachwork (page 44). Seven months later he had sculptured from metal a body with such advanced features as a torpedo rear deck, a hidden spare tire, bumper-mounted license plates, recessed door handles, fender-mounted headlights, and fadeaway fenders. The Maybach engine drove it well over 100 mph. Remember, that was in 1931; it wasn't until two years later that the ultra-modern Pierce Silver Arrow appeared, with most of the features of the earlier Spohn car.

In 1936 the company exhibited another pace-setter at the Berlin Automobile Show. Still well ahead of the times, this special body (bottom photos, page 44), which looked like the grandfather of postwar Studebakers, boasted such innovations

as blended-in fenders. Incidentally, the split wipers that Spohn designed to work on its curved windshield were the first of the type that the world had ever seen.

There followed the inevitable period of feverish war production (Spohn made direction finders for the Wehrmacht). When that outfit proved not so invincible after all, the French forces occupied Bavaria, and Spohn built French Army vehicles. Then, with German currency reform, Spohn found itself back in the custom body business. Most of its new clients are U.S. Army personnel. Josef Eiwanger Jr., owner of the company and son of one of the original partners, plans to invade the U.S. market with custom bodies on Cadillac, Chrysler, and Ford chassis, marketed under the Spohn name

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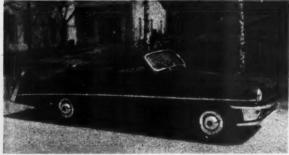


This Spohn creation, owned by George W. Love of Memphis, Tenn., began life as a 1947 Olds convertible. Chromed grille is an unadorned floating bar type. There is no customary bumper; instead, the ends and guards appear as individual parts



PHOTOS BY JACK CAMPBELL

The car is perhaps at its best when you can see the surprisingly long, low rear deck lines. Though the entire car looks a little Packard-like, the rear particularly uses the familiar concave motif, large lid, and big, sharp-cornered fenders



COURTESY SPOHN

Once upon a time, a 1941 Buick was clobbered completely. Then it came to Spohn. Inside and out, car is red and black



COURTESY SPOR

On the other hand, this "Buick" is a 1940 Ford. Variations on the theme of these rear fenders grace most Spohn cars

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"Le Centaur" is a 1950 Chrysler New Yorker, unexpectedly wearing the face of one of its bitterest rivals, the Buick. The airscoop is genuine; the car's aircleaner dropped down to take the lower bood. Rear has continental tire, new fins

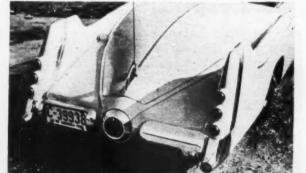


Here are three related Spohn postwar bodies, all of the same school. This is on a Veritas chassis. While Spohn's work may look rather fancy, individual components are severe



Also on a Veritas is this pale turquoise job. Though it differs only in its concave grille and emblem, its frontal

fre



Always a favorite with Italian coachbuilders, the Alfa Romeo doesn't often get the Teutonic treatment. Antenna-deck handle combination is one that may some day be mass-produced



effect is quite different from the smooth-nosed car at left

COURTESY SPOHN

Here's a Pontiac's interior after getting Spohn treatment. The button-free dash, tunnel-mounted radio and cubby hole, MOTOR TREND believes, will appear in U.S. cars of future

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Lieutenant Arthur Cooper waited seven months for Spohn to finish his Packard; the sliding safety-glass roof for the front compartment took most of the time. Now be can remove the entire roof by loosening six nuts. Car is light grey



The seats in the Cooper car form beds. The central pedestal holds not only a five-band short-wave set but also an icebox. Rear fender vents (not shown) operate back window defroster



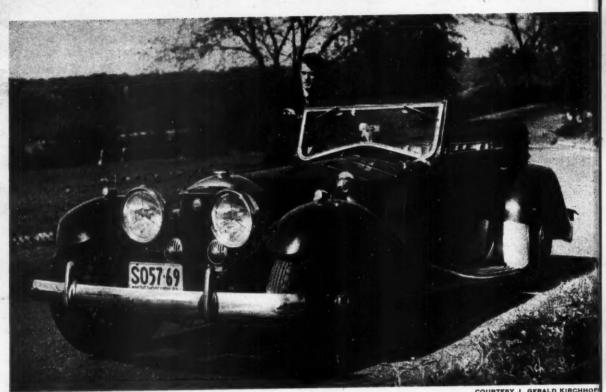
Utterly unrecognizable as a Packard is the nose of the "Comet." Grille-bumper combination is aluminum. Ordinary headlights are built-in; the projecting "bombs" hold foglights



Today's Spohn interiors may be in Fords, but no detail shows up as substandard. Upholstery, carpets, padded dash, even the door pocket show care worthy of a \$20,000 pre-war Maybach



Utilizing virtually all the Spohn "signature" features, this Ford is still identifiable. Red and black combination, a Spobn favorite, belps to make a very low car look even lower



1934 Invicta

COUNTEDT J. GENALD KINGSING.

cor fea the



1930 Miller Special, Body by Kirchhoff

COURTESY FRED HORSLE

Everything is relative, they say. Hidden around the nation are some old cars so remarkable that they are

Classics Among Classics

By Robert J. Gottlieb

THE FORD MOTOR COMPANY recently announced a pet project of its advanced styling department—a true hardtop convertible (Motor Trend, July 1953). Called the Syrtis, the car features an all-steel top which can vanish electrically beneath the rear deck lid. The press release states, "The new car design would be the first to give full sedan seatroom in a two-door convertible. Large simulated exhaust ports extend rearward beneath the convertible's doors, with actual exhaust stacks emerging through chromed jet tubes faired into the outward edges of the rear humper."

The automobile has developed largely through just such unusual advancements. Unique experiments have led engineers to improve—as well as to discard—various features, resulting in constant improvement. A superior experimental body or mechanical design can enter the realm of classicism; but for each design improvement, countless features were tried and discarded.

Classic enthusiasts are familiar with radical construction changes which never succeeded. In 1908, George Schebler (of Schebler Carburetor fame) built a car with 12 cylinders. When using only one of its two carburetors, the engine operated on six cylinders instead of 12. When the driver wanted power and not economy, he pulled a lever to cut in all 12 cylinders. This innovation, of course, never became popular.

Consider the Julian, manufactured as a prototype in 1922, whose driver could adjust the brakes while the car was in operation. Or the 1925 Locomobile 48 "Sportiff": its manifold pressure regulated the oil pressure, and the harder the engine pulled, the greater was the oil pressure, regardless of speed.

Body experiments have also been numerous, and many, like the radical mechanical changes, were satisfactory but never accepted. As early as 1907, the Gale automobile featured a hinged body. In the event of mechanical failure, the entire body could be tilted or raised for easy access to the engine and drive train. In 1922, the Carrm Convertible Body Company produced an automobile body that could change from a roadster into a six-passenger touring car. Manipulating the top bows created

three different body styles; when the car was used as a roadster, its convertible top was hidden from sight.

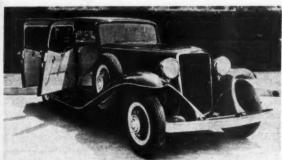
In 1930 the Kirchhoff Body Works of Pasadena, Calif., built a car on a Miller Special chassis (photos below and opposite). Actually a speedster, it was designed so the top disappeared completely from view when lowered. The entire rear deck raised to accommodate the top and its framework (just as in the newest experimental Ford convertible) and the car could not be driven until the rear deck was lowered into position: one handle secured the deck at three points and, to reach the handle, you had to move the seatback forward. The seatback could not be restored to position unless the deck handle was again in the locked position. Metal work was so exact that there was no sign of the deck break when the lid was down.

The standard Miller front-drive system was driven by a supercharged V-8 engine. The powerplant developed 325 horse-power—enough to attain a car speed of 135 mph. The supercharger turned up 36,000 rpm and had to be water-cooled. That explains the extra "radiator cap"—it tops a water tank.

The builder claimed that the body design and construction counteracted stresses imposed on the car by high speeds. The entire body was aluminum and duralumin; the front fenders, including brackets, weighed a little over 11 pounds each. The builder's successful theory was based on the use of aluminum to save weight and duralumin to give support.

The Miller's streamlined appearance gains by the lack of runningboards or steps, hood louvers or latches, and door handles. Removable handles opened the hood. Streamlining was also accomplished by building the car long and low (overall height was four feet, 10 inches with the top raised). The slanted windshield was mated to the top bow and the then-customary overhang eliminated to decrease wind resistance. Particularly outstanding is the molding which runs from radiator to tail; it offsets the break of the spare wheel and tire, mounted amidships à la Allard.

An experimental prototype Peerless sedan that cost \$35,000



One of the last models of the highly esteemed Peerless was this aristocratic car, with its doors curving into the roof



The Kirchhoff-Miller's rear deck, having swallowed its canvas roof. No sign of the top remained when the lid closed

СННО

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CUSTOM CRILLE BARS also available for Ford '51.52,
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CHEVY CHROME MOTOR KIT \$22,50 1937-53 Chevy

includes chrome wire ioom, red ignition wire, brass tips, valve cover and sideplate. A \$25.75 value if each item pur-chased separately. Get the complete kit and **SAVE \$3.25**

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Cad styling at fraction of the cost. Solid brass castings ready for welding & leading to become an integra

part of the body. Light is completely wired and ready for installation. Specify make, year and model \$29.95 per pair complete



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3319-MT-11 So. Grand A Les Angeles 7, Calif.

(page 51) featured doors that formed a part of the roof, as on the Tucker and late-model Kaisers. The Peerless has a smooth rather than rakish appearance, due to the wheel discs, elimination of the contemporary bulky radiator cap, and the clever placement of hood louvers behind the spare tires (so the side panels appear solid). Continuous wide striping applied to the body and fender moldings cleverly hides vertical breaks in the body lines caused by the hood, doors, and doornosts.

A classic of slightly more recent vintage is the 1934 4.5 liter (275 cubic inch) Invicta (page 50). The car's outstanding appearance resulted from complete disregard for conventional styling. The low-slung body appears lower than it actually is, because the doors (usually the low spot of a body line) are the highest point. Priced over \$7000, the car appealed to the wealthier British element because of its style. Its performance, though good, was not outstanding.

Each of these cars illustrates at least one unusual design trend. None of them are in production today, though they are all examples of progressive automotive engineering. The planning by Ford designers, as applied

to the Syrtis, is a modern example of design development. Future cars almost certainly will have actual convertible hard tops. When perfected the idea will be readily acceptable to the public, but will the simulated exhaust ports meet with approval? The Syrtis has many other fascinating features that may appear on future production cars in modified, perfected form. The Ford Motor Company is to be commended, and we say this whether we agree or disagree on the worth of its proposed innovations.

. . . Classic car parts are getting harder and harder to find. Despite the scope of our hobby, and efforts made to salvage valuable classic equipment, good parts are still being scrapped for junk prices. To remedy this, and to help other readers obtain parts, mail us the names and addresses of wrecking yards, and the parts they specialize in. We will print the information each month at the end of Classic Comments. To start the ball rolling, Atlantic Auto and Truck Sales, 19020 South Figueroa Street, Gardena, Calif., has Pierce-Arrow parts, and some Packard, Stutz, and Ford "T" components.

-Robert J. Gottlieb

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MT RESEARCH



Please send your name and address if you want a personal answer. Only selected questions are printed in Technical Service.

QUESTION-I have seen a great many advertisements for automobile tachometers and vacuum gauges and I wonder how much closer to more efficient driving their use can bring the average driver. I'm interested in economy of operation and any information you can give will be appreciated. Al Brown, Glen Cove, N. Y.

ANSWER-Improvements in economy can be shown by using a vacuum gauge. However, your driving habits must be changed to conform to directions supplied with the instrument. An accessory trial by MT Research appeared in our June '51 issue. At that time we were able to show a gain of 21/2 miles per gallon when driving according to directions.

OUESTION-I have a 1941 Buick Special with the stock dual carburetor manifold. I have tried running both carburetors together, using two front Buick carburetors and also two Fords, but both setups idle too fast and give low gas mileage. I would like your recommendations as to anything that would make the system work properly. W. H. Pillow. Memphis. Tenn.

ANSWER-The fault appears to be in your throttle linkage setup, as there is no reason why a dual installation should not idle well. If you are using the stock Buick linkage, I would suggest replacing it with the type as used on most conversions. Try connecting both throttle shafts together making sure that there is no bind in the linkage and that they both open and close simultaneously. Then connect the forward carburetor with the gas pedal. The Buick carburetors have a larger throat diameter and should work better than the Ford. The proper jet size will have to be determined by performance. Be sure that identical setups are used in both car-

QUESTION-Would you please tell me if you know of anyone who has installed an overdrive transmission in an Oldsmobile V-8 of '49 or later? I would like to get in touch with someone who has made the installation, Philip R. Denham, Denver, Colo.

ANSWER-I do not know of anyone who has done this, although it has probably been attempted. Probably the best substitution would be a '49-'51 Lincoln overdrive



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Take Your Choice and KEEP Your Money!

Ridiculous? Not at all! Read this and learn how the "little club we started by accident" has become the Biggest Car Owner's Cooperative of its kind in the world!

by "GILKY" GILKERSON

FTER the series that appeared in Motor Trend, most of you know how we've grown from a handful of car "fanatics" to about a half million members all over the world-including about 50,000 readers of this magazine.

A few years ago, we started what we term a car owner's cooperative. We figured that if co-ops were a good thing for farmers, grocers, etc., car owners could benefit in the same way from an organization that could get discounts for them and act as a sort of clearing house for auto-

Well, the word got around pretty fast. In fact, the Club is so big now we can't have regular meetings, so we keep in touch by mail through the Club news-

BENEFITS OF NATIONAL CREDIT CARD

Besides the regular Membership Card entitling members to discounts and other courtesies, members can apply for the National Credit Card issued to qualified members. Looks like your regular oil company credit card, but it's good all over the country for all kinds of things besides gas and oil: hotel rooms, meals, airline tickets-even loans to finance weddings, vacations, or practically anything else up

FREE TRIAL PRIVILEGES

Some time ago, a manufacturer of automotive parts asked us if Club members would like to try a new product of his on their cars.

"Gilky," he says, "I don't even want a deposit from your members. I'll send this new equipment to any of your members on a free trial. Tell them to try it and if they don't like it send it back." This worked out so well (turned out the members were honest, or I wouldn't be telling this story) that other manufacturers asked our members to try their products the same way: some of them are shown on this page.

THAT GOES FOR ANYTHING ON THIS PAGE IF YOU'RE ALREADY A MEMBER

Just write your card number in the coupon and check off the things you'd like to have sent you. That's all: don't enclose any money, don't pay the post-man anything. Try first, then decide if you want to keep what you've sent for. If so, it needn't cost you a cent if you use the Club plan.

MILE-O-METER

Thousands of folks depend on the Mile-O-Meter to help them save gas. This handy gadget simply hooks up to the intake manifold and tells you when your engine is getting the most out of each gallon. Besides that, it gives readings that allow you to diagnose your car's condition at any time, same as a professional tune-up expert does. Looks nice on your dash too. Check the coupon if you'd like to try it.



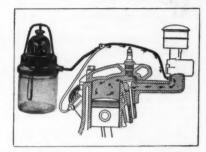
SPECIAL OFFER TO NEW MEMBERS

If you're not already a member, you can join by filling out the application below and enclosing \$1 to cover the cost of the Club newspaper and other expenses. Also, check anything in the coupon you'd like to try free. Just to make it interesting, we've put together a big free package for new members. You get \$2 worth of gas coupons, credit memoranda, lots of other

EVERYTHING ON APPROVAL

When you get your new member package, look it over and decide whether or not you want to stay in the Club. If not, just bounce the package back at us (frankly, some people have done just that) and we'll return your buck right away with no questions asked, no hard feelings. You don't risk anything, and we're betting you'll enjoy being a member as much as we'll like having you in the

Gane Economy Club, Dept. CM-11 605 West Las Tunas San Gabriel, California



TRY THE "POOR MAN'S MECHANIC" FREE

This Automatic Tune-Up Injector is an attachment that automatically flushes out your car engine every 100 miles before carbon becomes a problem. Tucked under the hood, tune-up fluid keeps building up in the Injector's small reservoir on top. When full, it flushes out your engine (you don't even know it's going on) and starts filling up again for the next time.

If you'd like to try it free (the manufacturer throws in a \$1.00 pint of tune-up fluid free; you keep that no matter what), just check the coupon.



THIS LITTLE STINKER

may give up to 25% more mileage, according to some of its 500,000 current users. Most folks don't know their engine uses a richer mixture when they take their foot off the gas than when they step on it. When your car slows down or idles, higher manifold vacuum sucks far more gas than is needed. This gizmo replaces idle adjusting screw to bleed air at high vacuum periods, thus saving fuel. Sounds like a good idea, and besides the economy, like a good idea, and besides the economy, many users claim faster pickup and smoother idling. A few say "no improvement" though, and fire the little stinker back. That's why we say, "try before you buy." We'll send one if you'll check coupon and give your car's make, year, & number of cylinders.

	nal GANE ECONOMY CLUB . Las Tunas, San Gabriel, Calif.
Dear Gilky: Please send for free trial: Ai	ile-O-Meter 🗌 Tune-Up Injector 🗎 "The Little Stinker"
☐ I am a member, Card No	Name
☐ Here's a buck. Send me the new mem- ber package. If it looks OK, I'll keep it. If not, I'll send it back within 10	CityZone
days and you'll return my buck.	State

November 1953

Fifty-three



Famous new Almquist SOLID-COPPER Head Gaskets are guaranteed to increase horsepower, pickup & gas mileage! Users report from 1 to 5 extra miles per gallon! Praised by leading magazines—used the world over! Special thin .005-020' gaskets increase compression up to 8:1 or higher—thus are equivalent to milled or custom heads! Genuine Solid-Copper (not laminated or shim). Guaranteed Corrosion Resistant, Blowout Proof, Easy to Instali!

FOR ANY MAKE CAR, TRUCK, RACER, ETC.
Ford V-8s & Mercs, Set, \$6.95 (Special
Racing Set \$6.95); All other V-8 Cars,
Set, \$7.75; All 8 cyl. Inline Cars,
\$8.95; All 4 & 6 Cyl. Cars, \$6.95.

Twin DUAL EXHAUSTS



"America's Finest"

SAVE 25%. Complete System, Dual Headers, Extensions, Hangers, Tailpipe, 2 "Steelpac" Mel-O-Tone Murflers, etc.—Increased power, mileage, engine life!

MONEY-SAVING HEADER KITS
Finest Pre-Fabricated Headers—easily
assembled. Fords & Mercs.....\$9.95



New DUAL MANIFOLD



Acceleration?

Fastest & smeethest dual carburetion made—Absolutely me
"flat spots!" Increases acceleration and power up to 20%.

More efficient because 2nd car-

"flat spots!" Increases acceieration and power up to 20%. More efficient because 2nd carburetor does not cut in until after 20-25 mph—thus giving better & faster throttie response at all speeds ... se less gas! Easy to Install. Includes "Compound" Linkage. For ALL CARS—Ford, Chev., Ply., etc. Complete....\$14.95

"Amazing

COMPOUND DUAL CARBURETION



given free with purchase of BIG NEW CATALOG showing Finest Racing, Power & Custom Equipment for all caral 100's of bargainal Also "Souping & Customizing Tips!" SKIND 28 CRECK Items wanted & Cilp Ad: Ship C.O.D. Enclosed \$.....Specify car and Yr.



ENGINEERING

transmission. I suggest Lincoln because this unit was designed for horsepower output equal to that of the Olds. An adapter can be made for this installation.

QUESTION—Does reboring an engine affect the compression ratio? In other words, does it raise or lower the compression ratio? M. R. Kaas, Seattle, Wash.

ANSWER—Compression ratio is the volume of the cylinder to the volume of the combustion chamber. Volume of the cylinder is that part of the cylinder swept by the piston from bottom dead center to top dead center. Volume of the combustion chamber is the area of the cylinder head when the piston is on top dead center. If you change the volume of the cylinder by reboring or enlarging the cylinder you will automatically raise the compression ratio.

QUESTION—1. Does the use of high compression aluminum heads and exhaust headers with dual stock mufflers produce any noticeable increase in low speed acceleration on a '53 Ford V-8 with Fordomatic drive?

2. Recent ads in MOTOR TREND show intake manifolds for Ford V-8s for use with four-barrel carburetors. Does this benefit low-speed acceleration?

3. Is it possible to tell, percentagewise, the increase such changes would make? R. Blagden, East Hampton, Conn.

ANSWER—1. High compression aluminum cylinder heads and headers with dual stock mufflers will help low speed acceleration when used with Fordomatic drive. The increase will not be as noticeable as with conventional transmission due to the smoother operation of the automatic unit.

2. Four-barrel carburetors are designed for medium-through high-speed performance ranges with the additional two barrels cutting in at about half-throttle opening. When accelerating hard with well-opened throttle, all four barrels are in operation.

3. It is difficult to estimate percentage increases due to modifications, the reason being that two engines of the same make seldom produce the same horsepower increase with identical modifications.

QUESTION—I have a repair shop, and many of my customers complain that their packed mufflers do not have as loud and deep a tone as they would like. Can you give me any information on rebuilding these mufflers to their liking? Jack M. Studebaker, Urbana, Ohio.

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ANSWER—I have built a few packed muffers, so here goes: The shorter the muffler, the louder the noise; the larger the hole diameter and tail pipe diameter, the louder and deeper the tone; the harder the packing material, the sharper the tone; the softer and more porous the packing material, the softer the tone. Have a tinsmith roll up the outer can to the desired diameter from sheets of hot rolled iron; the inner tube can be rolled up from perforated flat stock or large, long, closely coiled springs. You can pack it with most anything—steel shavings, asbestos, even gravel. Hope this helps.

QUESTION — Is it possible to install ½-inch larger intake valves in a '49 Mercury? Would it be a good idea to relieve and polish the valve ports? Would this modification cause poor gas mileage? Would the engine have any more power? Emmett Carwin, Ogden, Utah.

ANSWER—Yes, 1/8-inch larger valves can be installed in a '49 Mercury. When doing this, the intake passages should be enlarged an equal amount, polished, and the manifold and block openings matched. Having gone this far, relieving the block between cylinder and valves is a good idea. This will allow the increased flow from the larger valves easier passage into the cylinder. Now that you have made it possible for the engine to breathe in easier, do not neglect the ex-



Motor Trend

haust; headers and duals are in order. These modifications will decrease gas mileage but will increase the power output.

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OUESTION-What is considered to be a sensible cruising speed for a stock automo-

ANSWER-There are many opinions on this question. To some people, the cruising speed of a car is its top speed. To others it is the speed (above the legal highway limit) which they think they can get away with, and not be stopped by the highway patrol.

Mechanically speaking, approximately twothirds of a car's top speed is considered a sensible cruising speed. Cruising speeds are, of course, dependent on highway and traffic conditions, plus legal speed limits.

QUESTION-Will the recent fire at the GM Hydra-Matic factory affect availability of replacement parts?

ANSWER-Yes, notices are being sent to repair shops stating that Hydra-Matic parts are on the critical list. Orders for new parts must be accompanied with the old parts, owner's name, car model, etc. This measure is to stop large orders with the possibility of subsequent shortages.

QUESTION-I am helping a friend fix up the engine of his '39 Dodge. Would a thinner head gasket help the performance? We would like to get about 7:1 compression ratio. Will a % cam improve the performance? Could you tell me the rated horsepower of the engine? Would installing a Fluid-Drive in this car affect its performance?

ANSWER-A thin head gasket should give approximately 7.5:1 compression ratio if the block has not been bored out: if it has been bored the ratio will be slightly higher. When using a thin head gasket, care should be taken to insure that the block and head surfaces are true and clean. A thin gasket will take up very little unevenness of the surfaces, with resulting leaks if care is not taken

Higher compression will give increased performance. A 34 cam will raise the torque curve of the engine to a higher rpm range, giving better top-end performance.

Installing a Fluid-Drive unit in the Dodge would entail quite a little expense and cut down the performance.

The rated bhp of the '39 Dodge engine was 87 @ 3600 rpm.

QUESTION-We are having a disagreement concerning the road-holding ability of different cars

Some say that a heavy car will hold the road better because of its weight, while I say that a light car like a Henry J will hold the road better.

ANSWER-Theoretically it is the design of the suspension and balance of a car, not weight, that governs its road-holding ability. Racing and sports cars demonstrate that this is true

With production passenger cars, weight seems to help, especially on a fairly straight road at higher speeds. On short turns a lighter and shorter car will do much better than the heavier, longer-wheelbase jobs.

peed-lit, 200,000 CANDLE POWER FOR SAFETY AT HIGH SPEEDS · Special Sealed-Beam Unit. Same as used by Specify 6 or 12 volt.

Available only from: Airplanes in Night Landings. · Built-In Metal Glare Deflector.

- . Modern Flat Pyrex Lens.
- · Aluminum Mounting Bracket furnished.

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Slick, Smooth, Lasting Lubrication

YOUR MOTOR WILL PURR . . . you will get more smoother, quieter miles on less gasoline. Easier starts on cold mornings and reduced oil consumption are yours when you add Motor Formula 9 . . . THE SLICKEST THING YOU CAN DO TO YOUR CAR!

and YOU can PROVE it! MAKE THESE SIMPLE TESTS YOURSELF . . .

1. FEEL THE STARTLING IMPROVEMENT: Feel the oil on the dipstick of your motor when warm . . . add a 15 oz. can of MF-9 and let your motor run for 15 minutes, then feel the dipstick again . . . IT WILL NO LONGER BE STICKY. MF-9 makes the engine oil more SLICK and COOLER!



2. HEAR THE STARTLING IMPROVEMENT: Park your car in a quiet place. Place a pocket watch on the back seat and listen for its tick. . . Then add a 15 oz. can of MF-9 to your crankcase and let the motor run for 15 minutes then listen to the watch again . . . MF-9 REDUCES MOTOR NOISE AND SHIMMY SO YOU CAN HEAR A WATCH TICK!

NO CARBON PING REDUCED ROD KNOCKS LESS PISTON SLAP

3. SEE THE STARTLING IMPROVEMENT: Hold a piece of Kleenex to the tailpipe of your car with the motor running. . Then add a 15-ax. can of MF-9 to the crank-case and drive 25 miles, then hold another piece of Kleenex against the tailpipe . . . NOTICE THE REDUCTION OF OIL SMUDGE AFTER USING MF-9!



Motor Formula 9 pays for itself many times over in better mileage, less oil consumption, fewer repair bills plus added driving pleasure for you.

MONEY BACK IF NOT SATISFIED . YOU CAN'T LOSE WITH MF-9 MF-9 is a pure 100% lubricant—no harmful chemicals

Dealers wanted-write for information on your letterhead

\$1.50	1
SPECIAL SO EA	
2 cans for Z.JU	进

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	. 1	п
		10

Free folder of Motor Formula 9 Facts One 15-oz. can of MF-9 @ \$1.50 ☐ Two 15-oz. cans of MF-9 @ \$2.50

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November 1953

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MAKE YOUR INTEREST 1953 BUICK SPECIAL IN CARS PAY OFF



Also Allied Mechanics and Diesel! By EASY Shop Method TRAINING-AT HOME!

LET NATIONAL SCHOOLS—the famous resident school, biggest in the hot rod capital—teach you at home—fast! Almost 50 years of training men like you.

1000's of successful graduates!

GREATEST DEMAND IN HISTORY FOR TRAINED MECHANICS! NOW'S YOUR CHANCE!

MECHANICS! NOW'S YOUR CHANCE!
What an opportunity! With trained mechanics making
more money than ever...with over 8 million cars needing big service and repair jobs...with defense industry
needing 1000's of trained mechanics...what a chance
you have! Right now start training for the big money
you've always dreamed of earning. Mail the coupon.

YOU GET COMPLETE TRAINING-AT HOME! We bring famous National Schools right to you! You learn about gas engines, Diesel and special fuel engines, garage mechanics-fast! Lots of pictures and diagrams!

Your National Schools training is easy and practical, for it's based on actual shop methods in National Schools' big resident school. Mail the coupon for full details—now. YOU FARN WHILE YOU LEARN! You get practical experience and can get paid for doing it! National Schools Home Train-ing is approved for eligible vets. You may be eligible, Look on coupon. Do it now,



YOU ALL THEM TOOLS!
YOU START OUT WITH real professional tools like these. And you keep them!

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LESSON show how we train you! SEND FOR THEM TODAY! NATIONAL SCHOOLS

TECHNICAL TRADE TRAINING SINCE 1905 4000 SO. FIGUEROA STREET, LOS ANGELES 37, CALIFORNIA In Canada: 193 E. Mastings St., Vancouver, B. C. Poth Decident and Nome Study Courses Offered

MAIL NOW TO	OFFICE NEA	REST YOU!
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(mail in envelope or paste on postal card)

NATIONAL SCHOOLS, Dept. BR-113

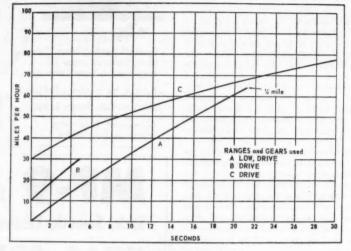
4000 S. HGBURGA STREET
LOS ANOBELS 37, CALF.
On CHICAGO 7, HEINOIS

Send FREE Auto-Mechanics Book and Sample
Lesson. No obligation, no salesman will call. BURTHDAY 19

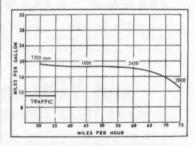
CITY_ BONE STATE Check if interested in Resident School Training at Los Ange VETERANS Give Date of Discharge

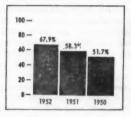
(Equipped with Twin-Turbine Dynaflow)

THE STORY IN FIGURES



ACCELERATION





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FUEL CONSUMPTION

DEPRECIATION

PERFORMANCE

CLAYTON CHASSIS DYNAMOMETER TEST

	a hill at full		a, wille.		
 	RPM	MPH	ROAD	HP	
	2000	45	65		
	2500	78	85	(max.)	

ACCELERATION

ACCELERATION
(In seconds; checked with fifth wheel and electric speedometer)
Standing start (4-mile (64 mph; LOW and DRIVE range)
0-30 mph (34, car speedometer; LOW and DRIVE range)
eter; LOW and DRIVE range)
10-20 mph (DRIVE range)
10-20 mph (DRIVE range)
2.78
2.72
30-40 mph
40-50 mph
5.20
40-50 mph
5.20
60-70 mph
8.00
70-80 mph
13.85

TOP SPEED (In miles per hour; clocked speeds over surveyed 1/4 mile) Fastest one-way run Slowest one-way run Average of four runs

FUEL CONSUMPTION FUEL CONSUMPTION
(In miles per gallon; checked with fuel flowmefer,
fifth wheel, and electric speedometer)
Steedy 30 mph 19.97
Steedy 45 mph 18.80
Steedy 40 mph 16.80
Steedy 75 mph 13.70
Simulated traffic over
measured course 11.54

BRAKE STOPPING DISTANCE (To the nearest foot; checked with electrically actuated detanator)

30 mph 45 mph 60 mph

GENERAL SPECIFICATIONS

BNE

Type
Bore & stroke
Stroke/bore ratio
Compression ratio
Displacement
Advertised bhp
Piston travel
@ max. bhp
Bhp per cu. in.
Maximum torque
Maximum bmep

in-line, ohv, 8 cyl. 3.187 x 4.125 1.29:1 7:1 7:1 263.3 cu, in. 125 @ 3800 rpm 2612 ft. per min.

DRIVE SYSTEM Standard transmission .475 224 lbs.-ft. @ 2200 rpm 128.4 psi Three-speed synchro-mesh using helical

Ratios **Automatic transmission**

gears 1st 2.67, 2nd 1.66, 3rd 1.00, reverse 3.02 Torque converter with gears
DRIVE: 1 x converter
ratio (2.4:1 maximum
at stall); LOW: 1.82 x
converter ratio; REVERSE: 1.82 x con-

Rear axle ratios

verter ratio Conventional 3.9:1, automatic 3.6:1

DIMENSIONS Wheelbase 121.5 in. Front 59.1 in., rear 59 in. 2.05:1 Wheelbase/tread ratio

No

Overall width
Overall length
Overall height
Turning diameter
Turns lock to lock
Weight (test car)
Weight/bhp ratio
Weight distribution

76.0 in. 205.8 in. 63.4 in. 39.5 ft. 51/4 4000 lbs. 32.0:1

52.0:1 Front 53.75%, rear 46.25%

Weight/sq. in.
brake lining
Tire loading (% of
recommended maximum at curb weight)

21.6 lbs.

Front 84%, rear 72%

SAFETY CHECK

DRIVER SAFETY		
	YES	NO
Blind spot at left windshield post		
at a minimum?	X	
Blind spot at rear vision mirror		
at a minimum?	X	
Vision to right rear satisfactory? Windshield free from objectionable	X	
reflections at night?	X	
Dash free of annoying reflections?	x	
Left side of dash free of low		
projections?		X
Cigarette lighter, ashtray and glove		
compartment convenient for driver?		×
DRIVER AND PASSENGER		
Front seat apparently locked securely		
at all adjustment points?		X
Metal strip eliminated between front		
quarter window and main door		
window?		X
Rear view mirror free of sharp		
corners?	X	
Right side of dash free of		v
Adequate shock-absorbing crash pad?		X
		^
REAR SEAT PASSENGERS:		
Back of front seat free of sharp		
edges and projections?	X	
Rear interior door handles		
inoperative when locked?	X	
Adequate partition to keep trunk		
contents out of passenger compartment on impact?	X	
compariment on impacts	-	

PRICES

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MICES	
Including retail price at main fact and delivery and handling charges Four-door se Two-door se Hard Convert	but not freight.) dan \$2255 dan 2197 itop 2295
Convers	1DIE 2333
CCESSORIES	
Twin-Turbine Dynafi	low \$192.50
Power steer	ing 177.40
Power bra	
Ra	dio 91.72
Hec	
Tinted gi	
White sidewall tires (additional cost per set)	
7.60 x	15 31.50

OPERATING COST PER MILE

(In this portion of the test table, MOTOR TRND includes those items that can be figured with reasonable accuracy on a comparative basis. The costs given here are not intended as an absolute guide to the cost of operating a particular make of car, or a particular car within that make. Depreciation is not included.)

not :	included.)		
	-	Cost of gasoline	\$185.70
		Cost of insurance	121.60
		Maintenance:	
		Wheel alignment	5.60
	Brake	reline (front only)	9.20
		Major tuneup	9.60
abor	only: includes:	clean and adjust	-
		lugs, adjust spark	
ning.	carburetor, fa	in belt and gen-	
ntor.	Clean air clea	oner bottery ter-	

erator. Clean air cleaner, battery ter-minals, bowl and fuel lines, check coil, condenser, voltage control, heat control, compression and vacuum, tighten cylin-der heads, manifolds and hose connections.) Automatic transmission (chaege lubricant) First year operating cost per mile (based on 10,000-mile annual average)

MAINTENANCE AND REPAIR COST ANALYSIS (These are prices for parts and labor required in various repairs and replacements. Your car may require all of them in a short time, or it may require none. However, a comparison of prices for these sample operations in various makes is often of pertinent interest to prospective owners.)

interest	to	prospec	tive owner	8.)
	-		PARTS	LABOR
	Dis	tributor	\$16.46	\$ 2.00
		Battery	19.75	2.00
	Fue	d pump	15.00	4.80
		an belt	2.22	1.20
1	alv	e grind	4.11	23.20
One f	ront	fender	46.98	17.00
	Tv	vo tires	56.20	
	TOT	ALS	\$160.72	\$40.20

2.9€



Popular

WIRE WHEEL DISC

with Locks, set of 4 (REGULAR PRICE 99.50)



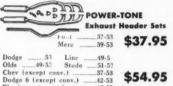
FLARE SKIRTS

\$8.45



Ply Merc39-53 Dodge .36-53 DeSoto 35-53 Chry Willys Stude Olds (eve 98) 35.53 35.53 Pont35-53 Buick35-41, 50-53 52.53

Skirts are all steel with concealed rubber liner. The easily installed skirts are primed for paint.



....42-53

Ply (except conv.) Ford 6 (except conv.)

GMC (Header Only)
Sets include headers, header extension, mufflers, tail pipe, clamps and brackets.

TAKE YOUR CHOICE Popular

WHEEL DISCS



chrome, Triple heavy gauge metal. DURABLE, finished to a high lustre.



Set of 4.....\$14.95 (15" or 16")

AUTO DISCOUNT CO. Dept. 11, P.O. Box 131 BURBANK, CALIFORNIA

HIDE-AWAY REAR AERIAL KIT

3 section beautifully chromed hide-away aerial and long aerial lead wire for custom REAR mounting. Aerial with 108" wire 7.45



Dual rear kit (two aerials)..

CARRY YOUR GARAGE WITH YOU



Heavy Vinyl Plastic CAR COVER Folds to 3"x8"x10" Easy to Handle Water-proof

GENUINE CONTINENTAL KITS



49-53 Ford 49-53 Chev

For All These Cars, Too!

Merc 51-53	\$119.95
Olds 83, 51-53	124.50
Olds 98, 52-53	124.50
Buick 51-53, Super, RM, Skylark	99.50
Linc 51-53	135.00
Cadillac 50-53	137.50
Cadillac El Dorado	199.50
Pontiac 50-53	109.50
Ply., Dodge, DeSoto, Chrys. 53	106 50
Stude 51-52	105.50
Packard 51-53	139.50
Kit includes sturdy tire mount, lock med	

tire cover, bumper extension, stone deflector, chrome hub cap and misc. hardware.

SORRY NO COD'S

25% deposit on all orders, F.O.B. Burbank. Add 3% sales tax in Calif.

SENSATIONAL VALUE

ME AIRPLANE SPARK PLUGS

Unconditionally Guaranteed to Last The Life Of Your Car!

Airplane-Type Aluminum Oxide Insulators give you these important bonus features:

High Speed Performance LIFE-TIME Economy Superior Spark Insulation Greater Strength Tougher Breakage Resistance.

cost is the last cost. Should this spark plug fail to function properly, it will be replaced free of charge.

GUARANTEE

Tougher Predkage Resistance.

Order todayl Only 79c each, including Spark Plug Clearance Gage. Send make, yr, No. of cylinders. Shipped postpaid or send \$1.00 per set deposit, balance C.O.D. Dealers inquire.

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HILLMAN MINX

Dual Intake (2 Carb) Manifold

ANOTHER HONEST CHARTEY CREATION



ONLY \$2975

Complete with installation linkage kit

DELUXE with chrome plated linkage kit

Dealers wanted Only \$3725

Send Money Order. We ship Postpaid.

Hillman Minx Hi Compression Head
by Edmunds net \$38.79

MUFFLERS TOO LOUD!



USE ANYWHERE IN TAIL PIPE

SINGLE NET\$4.95 TWO FOR NET ...\$9.95

You send money—We pay postage Be sure to tell us car & model

Cop-Sil-Loy per can, postpaid.....\$4.95



WIND WINGS

Chrome on brass belts and fittings—lucite panels. Works with top up or down with curtains in place or not—install yourself in 20 minutes. List \$38.50

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SEND 25c FOR WHOLESALE-RETAIL CATALOG

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Chrysler Road Test

(Continued from page 31)

heat and vent controls. The Chrysler's husky, T-handled emergency brake pulls straight out from under the panel at the left with little effort, and releases easily.

How does the Chrysler's heat and vent system operate? The New Yorker's ventilating system brings in lots of cool air from a cowl-mounted scoop. One of the few systems with an intake mounted on the cowl, it supplies air free of exhaust fumes and engine heat. The New Yorker's heating system provides plentiful warm air in cold weather.

Does the new body give any increase in vision? Last year's Chrysler had good allaround vision, and the '53. with its larger windshield and three-piece, wrap-around rear window, gives the driver an unobstructed view at all quarters. A major change is a one-piece windshield. The dividing strip down the center of the '52 Chrysler's windshield was not objectionable, but improved vision is noticeable in the new model. The chair-height seats help here too. The long, high hood conceals the right front fender, and moving the New Yorker in close parking places calls for good judgment to preserve the fenders.

Has Chrysler made any changes in the famed "FirePower" engine? Along with many owners and automotive observers, Chrysler apparently felt that the highperformance overhead-valve V-8 needed no changes, at least for '53. The much-discussed FirePower engine has a tremendous potential, an additional part of which it will use for '54, possibly up to as high as 235 horsepower, as predicted earlier. Although this engine is now outpowered by others, it still demands a great deal of respect. Its 180 horsepower, when measured in terms of maximum torque output. is comfortably up there with most of the new V-8 engines which have equal or greater hp ratings.

Has the Chrysler's transmission been changed? In 1951, Chrysler perked up its performance with a torque converter (Fluid-Torque Drive) coupled to Fluid-Matic Drive (the hydraulically operated "M-6" transmission); there were no changes this year. The torque converter improves pick-up with a 2.34:1 torque multiplication which (with the 1.61:1 third-speed ratio of the M-6 transmission) gives an overall starting ratio of 3.77:1 in DRIVE. By comparison, Fluid-Matic alone has a



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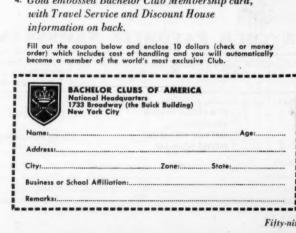
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1.75:1 third-speed ratio and a 3.57:1 ratio in first gear.

What are the advantages of this transmission? Chrysler calls the M-6 a "controlledtype automatic transmission"; those who favor other cars with automatic transmissions argue that this is not an automatic transmission because the driver must use a clutch to engage each range. That's a matter of opinion, for once in DRIVE range there is no need to shift gears manually; the only "work" involves letting up on the accelerator for an upshift to fourth gear.

Realizing the demand for a fully automatic unit. Chrysler recently unveiled a brand-new one, "PowerFlite," combining a torque converter and an automatic twospeed planetary gearbox. According to press releases, it combines "excellent performance characteristics with unusually smooth operation." After a short test of a car equipped with the new unit, MT Research is inclined to agree. Presently installed on a limited number of Crown and Custom Imperials, the new transmission will appear on the '54 New Yorkers.

PowerFlite provides higher starting torque (2.6:1) than any similar unit in the industry. With a 1.72:1 low gear, the overall starting torque will be 4.47:1. The unit weighs 214 pounds, and contains about 100 fewer parts than the most complicated automatic transmission in use.

In operation, PowerFlite is similar to other automatics, with no clutch or foot shift necessary. For all normal driving you leave the selector lever in DRIVE range. It then starts out in low gear and upshifts quickly and barely perceptibly at a speed dependent on throttle position. There is no advantage to using Low range and shifting manually to DRIVE as far as acceleration is concerned, but Low range can be used for other situations such as engine braking on steep hills, or passing at speeds over 60 where it would be difficult or impractical to down-shift through the use of the throttle. A down-shift with PowerFlite is possible at any speed up to 55 mph. When down-shifting with either the throttle or the selector lever, you get a noticeable increase in acceleration.

This new transmission will definitely be able to take advantage of the present engine, and as horsepower increases, it will be even more effective. Having driven a car with PowerFlite (after our regular test) we can readily understand why Chrysler delayed the announcement until the transmission was perfected. Power-Flite is the most effective and closest to ideal of all the automatic transmissions we have tested to date.

How does the present transmission-engine combination affect the New Yorker's performance? Discussions of the Chrysler transmission usually center about the presence of a clutch on the floorboard, and the foot-controlled shift. The MT Research speed runs gave an average top speed of 104.28 mph. These checks were made just at dawn (with the temperature at 108° F) to escape the midday heat. The Chrysler engine did not heat up, nor did it develop any vapor lock during the speed runs. This performance is significant, for nearly all cars require a lengthy cooling-off period between speed runs under these weather conditions.

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What economy can I expect from the Chrysler? If you enjoy the response of the Chrysler engine, you should be satisfied with a good compromise, for the Chrysler is not designed as an economy car. This year's car, which averaged 18.6 mpg at 30, 17.6 at 45, and 16.2 at 60 mph. showed improvement over the '52 Saratoga. The increase (ranging from 1.4 to 3.3 mpg) is due primarily to a slightly higher rear axle in the '53 car; this would also explain the slightly slower acceleration of this year's Chrysler.

Does the Chrysler pace its horsepower with braking power? The New Yorker's vacuum-boosted brakes (standard) brought the 4380 pound car to sure, swift stops with no indication of fade. The power brakes mean less pedal pressure but require as much pedal travel as conventional brakes. thus losing for the driver the advantage of pivoting from throttle to brake on his heel. At 30 mph. the Chrysler's stopping power was average for its weight class, but at 45 and 60, the New Yorker had more positive braking action. The average for others in the Chrysler's class is 108 feet at 45 mph. 206 feet at 60 (these braking distances range from 96 to 120 feet at 45, and 191 to 234 feet at 60). The New Yorker stopped in 99 feet at 45. 198 feet at 60 mph.

Is the FirePower engine easy to service? Accessibility of engine components is about average. As with most of the new V-8s, the New Yorker provides good accessibility to valves, generator, distributor, oil filler neck, and dipstick. Spark plugs are recessed; a plug check requires the removal of a long tube. The Chrysler's fuel pump, oil filter unit, and power brake cylinder are the only components that require a double-jointed mechanic for quick service. The power steering pump is behind the generator, in a good spot for servicing. The lack of air ducts under the hood gives the Chrysler mechanic a little more elbow room than in most engines of this size.

Does the New Yorker have a roomy trunk? Chrysler's trunk is one of the industry's largest. It held all of MT's complex (and growing) testing equipment—quite a feat for any car. The interior of the trunk was finished nicely, with a rug of quality rarely seen in trunk floor coverings; workmanship, as elsewhere in the car, was above average. The spare tire is mounted

vertically at the right side of the trunk. Because of the location of the gas tank filler cap at the rear of the car, a four-inch sill at the rear makes unloading or loading the trunk a little difficult. We have heard so many adverse comments on the filler cap location that we feel certain it will be relocated soon.

Is it built like a quality car? The '53 New Yorker makes its quality as evident on the outside as it does on the inside. Its three-bar grille of good quality material was solid and entirely free of rattles. The bumper guards are sturdy but barely average in size. Chrysler has no trim gimmicks—the headlight rims are standard in size and design, and chrome trim is limited to straight, unassuming rub strips, with a simple gravel guard at the front of the rear fenders.

High-quality workmanship and good materials were evident in the Chrysler's body panels. All sections fitted neatly. The upper part of the rear fenders is integral with the rear quarter body panel, but the lower portion is bolted on (the rear fender rub strip conceals the division), lessening repair costs.

The Chrysler's rear fenders end in vertical taillights with integral backup lights. The car's paint was free of ripples, and no blemishes were seen anywhere on the finish.

Will it be durable? If the MT test car was an example of average Chrysler workmanship and material, the New Yorker should last for thousands of miles of hard use. There were no squeaks or rattles from body panels or chrome, and the running gear was tight and quiet at the completion of the road test. The interior showed no signs of wear or tear after a full week of constant test driving by the MT Research staff; the upholstery and other trim are obviously not easily soiled. The quietrunning V-8 idled rather roughly throughout the test, but functioned perfectly at all times.

Would the Chrysler New Yorker be a good buy? From a service standpoint, the Chrysler should be worth its price tag.

Although its other advancements have outdated its present transmission, the New Yorker's performance cannot be overlooked. It's one of the liveliest of our large cars and can cruise at speeds well beyond those adequate and safe for present highway conditions. On the other hand, it is one of our finest family cars—quite sedate in trim, roomy enough for nearly any family, and a car that carries with it a sizable amount of prestige.

Match the New Yorker's luxury against its body style; compare its power with its clutch-assisted transmission. But when you appraise the Chrysler, don't overlook a thing—and you'll find that the New Yorker has a great deal to offer a buyer who wants a car of the Chrysler's caliber.





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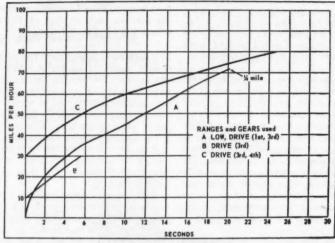
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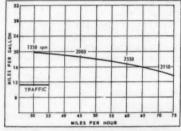
1953 CHRYSLER NEW YORKER DELUXE

(Equipped with Fluid-Torque Drive)

THE STORY IN FIGURES



ACCELERATION



FUEL CONSUMPTION

100 -59.6% 60 -48.3% 46.7% 20 1952 1951 1950

DEPRECIATION

PERFORMANCE

CLAYTON CHASSIS DYNAMOMETER TEST (All tests are made under full load, which is similar to climbing a hill at full throttle)

RPM MPH ROAD HP
2000 50 90
2500 63 112
3000 78 118 (maximum)

ACCELERATION (In seconds; checked with fifth wheel and electric speedometer)

(In seconds; checked with speedometer)

Standing start 1/4-mile
(72.6 mph; LOW and DRIVE range)
0-30 mph (33, car speedometer;
LOW and DRIVE range)
10-20 mph (08, car speedometer;
LOW and DRIVE range)
10-20 mph (DRIVE range)
10-20 mph (DRIVE range)
10-20 mph (DRIVE range)
130-40 mph
2.5
40-50 mph
30-60 mph
4.0
70-80 mph
7.5

(In miles per hour; clocked speeds over surveyed 1/4 mile)

Fastest one-way run Slowest one-way run Average of four runs 102.38

FUEL CONSUMPTION FUEL CONSUMPTION
(In miles per gallon; checked with fuel flowmeter, fifth wheel, and electric speedometer)
Steady 30 mph 18.6
Steady 45 mph 17.6
Steady 60 mph 16.2
Steady 73 mph 13.8
Simulated traffic over measured course

BRAKE STOPPING DISTANCE (To the nearest foot; checked with electrically actuated detanator)

GENERAL SPECIFICATIONS

ENGINE Type
Bore & stroke
Stroke/bore ratio
Compression ratio
Displacement
Advertised bhp
Piston travel
@ max. bhp
Bhp per ruin Overhead-valve, V-8 3.813 x 3.625 .95:1 7.5 331.1 cu. in. 180 @ 4000 rpm

2416 ft. per min. Bhp per cu. in. Maximum torque Maximum bmep 312 lbs.-ft. @ 2000 rpm 142.0 psi

DRIVE SYSTEM Fluid-Matic Drive

Fluid coupling with hydraulically operated transmission 1st 3.57, 2nd 2.04, 3rd 1.75, 4th 1.00, reverse 3.99 Torque converter with similar transmission 1st 3.28, 2nd 2.04, 3rd 1.61, 4th 1.00, reverse 3.69; maximum converter ratio 2.3 Fluid-Torque Drive

converter ratio 2.3 With Fluid-Matic 3.54. Rear axle ratios with Fluid-Torque 3.36 DIMENSIONS

Wheelbase Tread Wheelbase/tread ratio neelbase/tread ratio
Overall width
Overall length
Overall height
Turning diameter
Turns lock to lock
Weight (test car)
Weight/bhp ratio
Weight distribution 2.11 in. 62.75 in. 43 ft. 3½ 4380 lbs. 24 8-1

Weight/sq. in brake lining Tire loading (% of recommended max-imum at curb weight)

1251/2 in. Front 56.213 in., rear 59.625 in. 2.2:1 76.75 in. Front 56.8%, rear 43.2% 21.8 lbs.

Front 97%, rear 73%

SAFETY CHECK

DRIVER SAFETY	YES	NO
Blind spot at left windshield post		
at a minimum?	X	
Blind spot at rear vision mirror		
at a minimum?	×	
Vision to right rear satisfactory?	×	
Windshield free from objectionable		
reflections at night?	X	
Dash free of annoying reflections?	X	
Left side of dash free of low		
projections?		X
Cigarette lighter, ashtray and glove		24
compartment convenient for driver?		X
DRIVER AND PASSENGER		
Front seat apparently locked		
securely at all adjustment points?	×	
Metal strip eliminated between	^	
front quarter window and main		
door window?		×
Rear view mirror free of		
sharp corners?	×	
Right side of dash free	-	
of projections?	×	
or projections:	-	
REAR SEAT PASSENGERS		
Back of front seat free of sharp		
edges and projections?		×
Rear interior door handles		
inoperative when locked?	×	
Adequate partition to keep trunk		
contents out of passenger		
compartment on impact?		X

PRICES

(Including retail p and delivery and	price at main fact handling charges,	but not freight.) Windsor
Four-door sedan	Windsor \$2482.25	Deluxe \$2711.00

Contract or day	\$2482.25	\$2711.00
Four-door sedan		\$2711.00
Club coupe	2461.75	
Hardtop		3015.25
Convertible		3236.75
Station wagon	3278.75	
dianon wagon	New Yorker	New Yorker
	ITOM TOTAL	Deluxe
Four-door sedan	\$3174.50	\$3317.50
		3288.50
Club coupe	3145.50	
Hardtop	3512.00	3677.75
Convertible		3970.00
	2000 77	0770.00
Station wagon	3922.75	

Stàtion wagon	3922.75	3770.00
ACCESSORIES		
	Fluid-Matic Drive	Standard
	Fluid-Torque Drive	\$144.00
	Power steering	180.35
	Power brakes	Standard
	Radio	115.00
	Heater	98.76
	Tinted glass	21.50
	lectric window lifts	134.00
	Air conditioning	642.00
White sidewal	tires (additional	
	8.00 x 15	35.80

OPERATING COST PER MILE

(In this portion of the test table, MOTOR TREND includes those items that can be figured with reasonable accuracy on a comparative basis. The costs given here are not intended as an absolute guide to the cost of operating a particular make of car, or a particular car within that make. Depreciation is not included.) Cost of apsoline \$163.26

Cost of insurance	146.60
Maintenance:	
Wheel alignment	6.00
Brake reline (front only)	13.38
Major tuneup	14.00
(Labor only; includes: clean and adjust or renew points and plugs, adjust spark	1-1.00
timing, carburetor, fan belt and gener-	
ator. Clean air cleaner, battery termin- als, fuel bowl and fuel lines, check	
coil, condenser, voltage control, heat	
control, compression and vacuum. Tight-	
en cylinder heads, manifold and hose	

Automatic transmission	
(change lubricant)	\$5.18
First year operating cost per mile	
(based on 10,000-mile annual average)	3.5∉

(based on 10,000-mile annual average)

MAINTENANCE AND REPAIR COST ANALYSIS
(These are prices for parts and labor required in various repairs and replacements, Your car may require all of them in a short time, or it may require none. However, a comparison of prices for these sample operations in various makes is often of pertinent interest to prospective owners.)

PARTS LABOR

	PARIS	LABUK
Distributor	\$ 40.00	\$ 4.00
Battery	33.45	1.20
Fuel pump	10.00	2.80
Fan belt	1.80	1.20
Valve grind	5.58	54.20
One front fender	57.26	21.50
Two tires	61.72	
TOTALS	\$209.81	\$75.90









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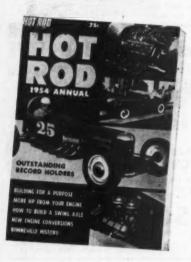
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The Rough Road to Fame

(Continued from page 20)

sporting licenses, and AAA had outlawed NASCAR. As innocent spectators, the Mexicans were understandably confused and irked. FIA finally intervened and the AAA agreed (without prejudice to its principles) to license—just for the Mexican race—any "qualified driver."

The feud certainly hurt the second race severely. The final entry list of 105 was way below the first race's 132. Prominent names were missing. Without strong government support, the resulting deficit might have been fatal.

The other major hitch was of the committee's own making, a result of inexperience and a certain persisting tendency to make particular decisions without considering general results. Like the first, the second race was a one-category "stock" event. Some modification was to be permitted, but the rules committee had to find out the hard way that the racing game is full of Philadelphia lawyers. Things got out of hand.

Article 11 of the 1951 rules (Automobiles Which May Compete) ran 12 lines. Last year, stock class specifications were expanded to 43 lines. This year (not counting the new light stock class) the subject occupies some 20 pages. Most of this added space is a categorical listing by make and model of permissible "factory options," over which confusion still hovered in 1952.

Amidst the medley of opinions on "stock" classification, there was one almost unanimous cry, only the Italians dissenting: Let the Ferraris pick on somebody their own sise! (See "Glove Compartment," on page 4.) Even the placid Troy Ruttman, a big boy who speaks softly, said flatly he wouldn't come back if European sports cars weren't eliminated.

It looked like a tough one. The race needs both the Ruttmans and the Taruffis. But the committee was catching on. A 5000 annual production quota unstocked the hot European jobs, a new "sport" class left them in the race.

Everybody was happier with the 1952 rules. The accident rate decreased, with only one death and fewer injuries than before. Yet all was not sweetness and light. When a supplementary ruling admitted 1953 models that appeared by November, Lincoln unveiled a big firecracker that blew everything else off the road. But was it stock? The outcries began again, this time revolving around the rule providing that "factory options will be accepted when they do not affect the engine itself or its accessories."

The committee, much less a mere reporter, had no way of knowing for sure who was right in the dispute over "what's stock?" What they suspected was that the Estes secret weapons were named Clay Smith and Bill Stroppe. These two red-hot mechanics set up an assembly-line system that examined the cars at each night's stop as minutely as Sherlock Holmes looking for a broken fingernail in Waterloo Station. If so, what could be done about it? You can make every-

body in the orchestra play the same score, but you can't make them all produce the same quality music.

Perhaps the inevitable answer to the whole problem, both stock and sport, had lain ready at hand waiting for the voice of experience to mention it. In Europe, the usual custom in extended races is to impound the cars overnight, allowing only limited time for overhauling, and often no time at all.

So this year we have the most important change yet made in the Pan-American rules. Three hours after it finishes each day, a competing car must check in at an impound area. There it will be sealed and put under military guard. The seals must remain unbroken until it crosses the starting line in the morning.

It would be silly to think the impound rule is a magic formula that will end all dissatisfaction. Gripes are as much a part of an auto race as gasoline. There will be holes to plug in this year's rules, just as always. But on the eve of the fourth Pan-American, it does seem a big step has been taken. After all, the main idea of road racing is to find out which are the best cars and drivers, not who's the richest owner or sponsor.

Another important step this year is the addition of light classes in both stock and sport categories. No longer will Fords have to fight Cadillacs, and Porsches fight Ferraris. In thus enlarging the race, the committee is thinking particularly of the amateur, the fellow who'd like to fix up an entry if he could see even a fighting chance. Many more Mexicans should now get a chance to enter their own race. There are some good young local drivers coming along, a number of them hot rodders. It is also hoped that the Pan-American may become a rallying point for amateur sports car drivers from all over the world.

But what of that nearly forgotten element, the race follower? His basic problem is the struggle to get something to eat, to find a place to lay his head for at least a few hours of the night, and to get from here to there.

The eating problem is mostly in Tuxtla Gutierrez. The only hotel of any size is the Bonampak. With its big main building, cottages, and extensive driveways, the Bonampak is attractive and convenient. But each year the management seems vastly surprised at suddenly finding the place full of people. The help gets in a tizzy, and the kitchen runs out of everything almost immediately. Fortunately, there are other eating places in Tuxtla, a taxi-ride away from the hotel.

Elsewhere up the road, all the night stops are in cities of a size that caters to tourists. No worry about food, but sleeping accommodations are tough to get everywhere. Except in Mexico City, the race committee books all available space. If you have credentials of some sort, plus luck and patience, you'll no doubt make out. Maybe this year these small difficulties will be absent; anyhow, let's remember it's a tough problem, but one which has been handled better each year.

This is less a gripe than a word of advice to race followers of non-official status. Be prepared. I've carried an air mattress and sleeping bag during the last two races, and used it. Don't forget that Mexican nights are chilly. Rain is possible but very unlikely except around Juarez. One of those little sleeping trailers would be ideal.

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How to keep up with the race? This is perpetually asked, but hard to answer. The competitors just barrel up the road until they get there. The press and VIPs-last year, and presumably this-go by plane. By rushing to the airport before the last cars start, they have just enough time to dash to the finish before the first cars arrive. Those traveling by car have two choices, neither very satisfactory. To catch finishes (generally much more exciting than starts) they must hit the road in the afternoon or early evening of the night before. The highway closes early in the morning, and you'll find it a jittery business arguing with bands of rifle-toting, blanketed-to-the-eyes country militia who appear to have been left over from Pancho Villa days. Most service cars go on the night before, and sometimes have room for passengers.

Reporters are well advised to follow by car at least the first day, to see for themselves what crashes and drop-outs there are. Along the road from Tuxtla to Oaxaca is the place to see what "toughest race in the world" really means. Spectators will find this mopping-up trip exciting, sometimes depressing, but never dull

The soldiers reopen the highway about an hour after the last start. You can still make Oaxaca by early evening. Next day, you can also follow and reach Mexico City by about dark. From here on, going ahead is far better. From Mexico City to Durango is 590 miles. Few cars drop out in the north. Finishes become increasingly exciting as the end approaches.

Whether they enter or not, car enthusiasts from Europe and the U.S. can take themselves a rousing pre-Christmas vacation in Mexico. With the impound rule leaving evenings free for competitors, the time is to be filled with a series of regional fiestas. These, especially in Oaxaca, are really something.

What of the future? We've seen the Pan-American grow each year. Until this year, permanence of the race was never assured; government permission was delayed until the last moment, with the resulting loss of entries. The new administration of President Ruiz-Cortines, however, is making a great effort to build tourist business. The Pan-American is an important part of its program. And this year, the Pan-American becomes the final test in a new world roadracing championship circuit.

A lot of racing people, some of them prominently identified with the Indianapolis 500, think Mexico has the makings of a much bigger public spectacle than the Memorial Day classic. On the Atlantic Coast, the Mexican race has been strangely overlooked by both the general and the racing press, as well as the radio networks. One of these days, they will discover that here is a sporting event that has just about everything the public loves. Then there will be a great beating of tom-toms, and the lush prose of staff writers will perfume the air. It couldn't happen to a nicer race.

-Don Pope



Dealers inquiries invited.

Driving around with Walt Woron

First-hand Impressions of the 1954 Dodge PowerFlite, a Cadillac and an Oldsmobile equipped with Dynaflow, and Chevrolet's Fiberglas sports car — the Corvette

NOTE—Here's the first installment of a new feature. Every month we'll tell you at the time or shortly after announcement dates whenever possible—just what it's like to sit behind the wheel of Detroit's latest, plus other interesting cars. Of course, we'll continue our road tests, but they take plenty of time, and we thought you'd like first impressions as soon as we could get them to you.—Editor.

IN THE NEW '54 DODGE, you get a fast, smooth shift from low ratio in D range (where you keep it all the time, except for steep hills and backing up). For top acceleration, you can floorboard the throttle and automatic shift comes around 65 mph. There's no advantage to using L and shifting to D, the reason being that the starting gear ratios are the same in both L and D. Automatic downshift for passing (possible under 55 mph) is fast and gives considerable jump. Rocking the car in snow or sand (which we tried) is easy. With your foot on throttle, you pull back on lever and quickly move it from right (LOW) to left (REVERSE). This isn't the only thing that makes driving the new Dodge easier, for it now has power steering on the '54 models. It's the same "full-time" power steering as used on Chryslers. In driving a Dodge with power steering, it gave us the impression that we were in a car with exceptionally easy conventional steering.

Cadillacs will make good use of Dynaflow. Just to satisfy our curiosity we drove a Cadillac with a torque converter. Here's what we found out: The most surprising thing is its smoothness. With the Hydra-Matic, no matter how well it's adjusted, you feel a certain amount of jerkiness when it shifts gears. Not so with Dynaflow; there are no gears (unless you use the Low range, which you can for more acceleration). It doesn't get up and go as fast as a Cadillac with H-M, initially anyway, but after you get rolling, acceleration is steady and smooth. A quick check of the car's ability to get moving from a stoplight was timed with a stopwatch. Here's what we got: o to 60 mph in DRIVE range, 15 seconds. Using LOW, then shifting to DRIVE, we knocked 2.5 seconds off this time. This compares quite favorably with Cadillac with Hydra-Matic (0-60 mph, 12.8 seconds). A rear axle ratio of 3.36:1 is used with Dynaflow. This appears to be a good compromise between acceleration and cruising. Response at cruising speeds is very good. We moved from 30 to 60 mph in 8.5 seconds. The Cadillac with Hydra-Matic is one second slower at this speed range. There are not many disadvantages to Cadillac with Dynaflow, and they are slight: possibly less fuel economy, a tendency to 'coast" for a few seconds after taking your foot off the throttle, and less engine braking because Dynaflow doesn't "shift down" as does Hydra-Matic. In any event, too many customers will not have to be concerned with either the changes necessary to accomplish the installation or the minor disadvantages, for when Hydra-Matic operations are again in full swing. this transmission will again appear on Cadillacs. The use of Dynaflow, however, allows Cadillac to continue operations on a modest scale.

It does the same for Oldsmobile, so we went on to Lansing, Mich. (where Oldsmobiles are made), and we drove an Olds 98 with Dynaflow. Our initial reaction was that the "jump" is missing, or at least toned down, but with 165 hp you're still not in the way of many other cars at a signal. You won't burn rubber, but you'll take off a lot smoother. If you want more "go" you can get it by using Low range, shifting to DRIVE at around 40 mph. We bettered our o-60 times by almost two seconds doing this. Olds with Dynaflow is not sluggish.

Having driven sports cars that could meet the purist's conception of a sports car without batting a headlight, and having looked at the Chevrolet Corvette as one that would be blinking all over the place. I've just been pleasantly, but pleasantly, surprised. The Corvette not only has "go" from a traffic light, punch at high speeds, an uncanny ability to stay flat through sharp turns and a solid ride, but has eye-appeal as well. Don't get me wrong! If you're looking for a competition sports car, keep looking (with only minor modifications, however, the Corvette would be suitable for competition). But ... if you're like thousands of others who want an open car that will give performance you can't get in a stock car without sacrificing comfort, the Corvette may be your answer (providing, of course, that you can get one, for the present rate of production is only two per day).

One day during my recent extended stay in Detroit, Dick Haynes, proud

owner of a new Corvette, let me take over the wheel of his car. We wended our way through city streets to one of the expressways, then wound around a park's curving roads, getting the feel of the car. (Later, I joined a press party that visited the body and chassis assembly operations at Flint, Mich., and drove another Corvette at the General Motors Proving Grounds.)

From this, I've come to the conclusion that the market Chevrolet can hit with the Corvette is not as limited as that for the "competition-type" sports car. The car is low, so low that even the lowest of the stock cars towers above you. This one thing alone gives you a feeling of roadworthiness. The seats are soft and contoured to your back. What's more, they hold you in when you slam around a corner at high speed. You can easily stretch out your legs. Getting in and out isn't too difficult.

Even though the car has Powerglide. Chevrolet was clever enough to put the selector lever of this automatic transmission next to the driveshaft tunnel. This not only gives you the impression of a standard gear box, but when you get used to it, you will find you can get plenty of performance out of it in combination with the 235-cubic inch, 150-hp engine. This was very ably demonstrated to me by Mauri Rose, who manually downshifted the transmission for braking down and accelerating like you would with a conventional box.

Probably one of the biggest surprises I got with the car was when I took it through some sharp corners at fairly good speeds. I'd heard that Chevrolet had designed the suspension so that it would stay flat and stick in corners, but I took it with several grains of salt. I needn't have eaten all that salt. It sticks better than some foreign sports cars I've driven. The steering has a 16:1 ratio, which may not be fast by sports car standards. but has good response. Mauri Rose, who has had months of experience with the car, took me around some test curves at 70 to 75 mph. Even a lower speed in a stock Chevy would have flipped you into the bushes. (A more complete report on the Corvette assembly operation, etc., will be in our December issue.)



Spotlight on Detroit

(Continued from page 12)

(105-inch wheelbase), giving it the step-down feature and a height 10 inches lower than standard models. Yet it's easy to get into because the doors are cut 14 inches into the roof. Powerplant is the 114 bhp Jet engine, although it's capable of taking the 160 or 170 bhp Hornet engine. With the Jet engine...

THE ITALIA WILL DO WELL OVER 100 mph. It has never been extended, but with the proper gearing (it now uses overdrive) it should be capable of doing close to 120, considerably higher with the Hornet engine. It rolls on Borrani wire wheels and to help prevent brake fade, it has air vents over the headlights for the front tires and brakes, and vents in the rear fenders. Only fake styling note on the car is the three "exhaust stacks" coming out the sides of each rear fender. The ends have reflectors, for stop-, tail-, and backup lights. The leather-upholstered interior, with two bucket seats adjustable fore and aft, is ventilated by means of an intake at the lower center of the wraparound windshield, with two outlets above the one-piece rear window. Space behind the seats is provided for luggage. Which leads us to comment on the space behind the rear seat on

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BALBOA, PACKARD'S NEW experimental sedan, basically a Caribbean with an entirely new top treatment. We should say lack of space, because with this radically new roof, designed by Chief Stylist Dick Teague, there is no package area. (Thank goodness; less chance for flying objects on sudden stops.) This is not the most important feature, however. The new top treatment, with an overhanging section (four to six inches) and a flat, up-and-back slanting rear window has several advantages: more headroom in the rear seat because the top does not have to slope as much to meet the conventional-type rear window; no glare (or a minimum amount) from the sun; rain and snow do not pile up on the window; better rear visibility with no distortion (when backing up it's like looking out a picture window); and, more ventilation if you want it, for on production models the rear window will roll down behind the rear seat. When asked . . .

WHY SUCH A RADICAL TOP DESIGN?

Dick Teague replied, "It was styled
with the objective in mind of cre-



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ating an entirely new and fresh upper structure, which has not been done in years." After discussing the various advantages, Teague also pointed out that since this would undoubtedly be a limited production model (the one we looked at being a hand-built model) there was a good possibility it could be manufactured of Fiberglas. He added, "Did you notice the top gives a longer rear deck, adding to the car's overall appearance?" We hadn't, but whatever reasons stylists give for doing something of this type, Packard has stolen the march on other manufacturers in combating the rear seat headroom problem. That is, all ex-

A STYLIST AT FORD WITH A SIMI-LAR IDEA. He (Ard Avakian) spent his own time and money trying out his pet personal project-providing more headroom for rear-seat passengers. He did this in the same manner that Packard did, that is, heightened the top line beyond the rear window, giving additional headroom above the rear seat (see photo, page 12). On his own ear, a '53 Nash Statesman, he had the Warren Plastic Co. construct for him a Fiberglas overlay to the contour that he wanted. That could provide rear seat passengers with about two more inches of headroom (if the metal top section had been cut and lifted). This top has some, but not all, of the advantages of the Packard Balboa. It seems that . . .

VISORS ARE IN VOGUE, what with a visor (built-in) over the windshield being rumored for the '54 Cadillac standard models, along with wraparound windshield and other styling changes reported in this column for September. Other changes for Cadillac for '54 will probably not include Dynaflow as optional equipment. In the interim between the using up of Hydra-Matic-equipped cars and full production of Hydra-Maties at Willow Run (predicted for around November 1), Cadillacs will make good use of Dynaflow (see page 66 for driving impressions of a Dynaflowequipped Cadillac).

LINCOLN IS STILL DOWN and will not resume until shortly after this issue reaches the newsstands, because of the recent fire at the Hydra-Matic plant. Resumption at Nash began as this is being written, Packard shortly afterward (down because of parts shortages). Studebaker announced a drastic 15 per cent cutback in production, while Kaiser continued idle. It's not a serious situation though for new car stocks are equivalent to a one month's supply, considered normal. And, incongruously . . .

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PRODUCTION IS UP over last year for the first eight months. Up through August of last year, General Motors produced 1.1 million cars compared to 2.1 million for the same period this year. Ford produced over a half-million through August of '52, just short of one million through August '53. Chrysler made about the same amount as Ford the first eight months of '53 and is not far behind Ford this year. As far as the entire industry is concerned, last year to date there were 2.7 million cars built, while this year there have been 4.5 million. And for the first seven months of this year, according to R. L. Polk & Co., new car registrations came within 26,000 units of the alltime record set in 1950. It's therefore not as glum as it might appear to be. As for the independents, there is good news that . .

WILLYS MAKES FIRST U.S.-JAPAN CAR PACT. The agreement is with Mitsubishi Heavy Industries Reorganized, Ltd., one of Japan's largest manufacturing concerns. Mitsubishi will manufacture the Jeep in its Nagoya plant (175 miles from Tokyo) and will rapidly develop the manufacture of its own parts to Willys specification, expecting to reach 100 per cent Japanese material content in the near future. Shinzo Fujii (Pres.) said, "We are convinced that technical collaboration between our companies will render a great contribution towards the elevation of Japanese automotive standards . . . What those standards are we will tell you in an early issue.

-Walt Woron



"Sounds okay, Miss Bates-you can turn off the motor now . . ."



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Nov. 6-15-Phoenix, State Fair

CALIFORNIA

Oct. 26-Nov. 1—Los Angeles, Fourth Annual Inter-national Motorama
Oct. 30-Nov. 8—San Francisco, Grand National Live-stock Exposition and Rodeo
Nov. 8—Riversida (March AFB), SCCA Races
Nov. 21-29—San Francisco, Motor Sports Show Nov. 28-29—San Diego Bay, Lightning Regatta

COLORADO

Nov. 15—Statewide Ski Season opens Dec. 29—Lamar, Cowboys Ball Dec. 31—Pikes Peak, AdAmAn New Year's Eve Fire-

HOPIDA

Oct. 9-Nov. 28—Orange Park, Greyhound Races Nov.-Mar.—Tampa Dog Track, Greyhound Races

KENTUCKY

Nov. 21—Louisville, Barbershop Quartettes
Dec. 21–22—Lexington, U.K. Invitational Basketball

LOUISIANA

Oct. 24-Nov. 1—Shreveport, State Fair Nov. 20-29—New Orleans, Shrine Circus

MASSACHUSETTS

Oct. 20-Nov. 1—University of Massachusetts Flower Nov. 5-8-Boston, Autumn Flower Show

Nov. (1st week)—Ionia, Apple Festival Nov. 13—Gaylord, "Round the Clock" Hunters' Wel-Dec. 25-Jan. 1-Otsego County, Ski Week

Nov. 1—Biloxi, Speckled Trout and Redfish Rodeo Dec. 3—Jackson, Shriners Convention

Nov. 8—Mountain View, Annual Square Dance Callers' Jamboree Dec. 19—Wyckoff, Christmas in Many Lands Celebration

NEW MEXICO

Nav. 1—Taos Pueblo, Ceremonial Dances
Nov. 12—Jemez and Tesuque Pueblo Fiesta Dances
Dec. 11—Taos and Santa Fe, Feast of Nuestra Senora
de Guadalupe
Dec. 24—San Ildefonso, San Felipe, Laguna, Isleta
Pueblos, Ceremonial Dances
Dec. 25-27—Pueblo Dances

NORTH CAROLINA

Dec. 5—Charlotte, Shriners' All-Star Football
Dec. 13—Pinehurst, Carolinas Golf Tournament
Dec. 17—Kill Devil Hill, Wright Brothers Anniversary
Dec. 31—Pinehurst, New Year's Eve Ball

PENNSYLVANIA

Nov. 19-Gettysburg, Lincoln's Address Anniversary

RHODE ISLAND

Through Nov. 15—Westerly, Annual Westerly-Charlestown Fishing Derby
Oct. 26-Nov. 28—Lincoln Downs, Horse Racing
Nov. 11—Roger Williams Park, Harness Racing
Through Nov. 11—Londsdale, Stock Car Racing twice
weekly

SOUTH DAKOTA

Nov. 23-29-Sioux Falls, Automobile Show

Dec. 27—Mission San Jose, "Los Pastores"
Dec. 28—El Paso, Southwestern Sun Carnival

WEST VIRGINIA

Nov. 4-28—Wheeling Downs, Horse Racing Dec. 5-19—Charles Town Jockey Club, Horse Racing

WISCONSIN

Nov. 14-Milwaukee, SCCA "Impossible Rally"

Nov. 19-23—Fourth Pan-American Road Race, Tuxtla Gutierrez to Ciudad Juarez

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Russian Car Industry

(Continued from page 20)

3.54 inch bore, a 4.64 inch stroke, and a 6.85:1 compression ratio. Weight is 5610 pounds, and fuel consumption is about 10

Russia's newest automobile, scheduled to go into mass production soon, is the proletarian-looking GAZ-69. Designed for use under the difficult road conditions of the U.S.S.R.'s rural areas, the GAZ has a canvas top and the ruggedness of a Jeep.

Two models will be available. The standard four-door car carries five passengers; the two-door model will take either eight passengers, or two passengers and a half-ton load. The GAZ has a four-cylinder, 55 bhp engine and uses a standard three-speed transmission

Plans are now under way to modernize three of Russia's postwar cars-the Moskvich, Pobeda, and ZIS. New, more powerful engines will be installed in both the Moskvich and Pobeda. Horsepower will jump from 23 to 37 in the Moskvich, and a 65-70 bhp unit will replace the Pobeda's 40 bhp engine. Compression ratios in both engines will probably rise substantially.

The Pobeda will get a new and lighter body. The Moskvich will be roomier and more attractive inside. Precise changes to be made in the ZIS have not been disclosed, but it will be more streamlined and will incorporate recent developments in automatic controls

Some recent Russian automotive developments appear to be more retrogressive than progressive. For example, in an attempt to reduce consumption of liquid fuels, the Russians are working on "economical electrically run cars for town use to replace those with internal combustion engines that poison the air with their exhaust fumes." Work is also under way on new automobile engines using gas, wood chips, coal, and peat as fuel.

With model changes coming only once in every seven or eight years, Russian cars are obsolete by U.S. standards. For some years after World War II, the gearshift on Soviet automobiles remained on the floor. Automatic transmissions, power steering, and even overdrive are still in the future as far as Russian cars are concerned.

At least two late-model Russian cars are



now operating in the United States. One is a 1952 Pobeda, owned by Stanley F. Slotkin, a Los Angeles business man ("I Smuggled a Car Out of Russia," MOTOR TREND, November 1952). The other is a ZIS, acquired in Korea by the late General Walton Walker. Shortly after its arrival in the U.S., the ZIS became the property of Trend, Inc., and appeared in the 1951 Motorama

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The Jeep-like GAZ-60 is Russia's newest vehicle, is built for utility even more than the low-priced Soviet sedan models

auto show in Los Angeles. After the show, it started a nationwide tour.

This year, the Russians began offering their cars on the world market. More than 100 Soviet automobiles arrived in Holland during July, and more are expected. Russia is expected to make trade agreements with other non-Communist countries for marketing the Moskvich, Pobeda, ZIM, and possibly the ZIS. However, since even a few thousand exported cars would make a serious dent in Russia's domestic supply, there is little prospect of a flood of Soviet cars on the world market.

Possibilities that the new Russian regime will increase the supply of consumer goods have been widely discussed since the death of Stalin. But it is a safe prediction that automobile travel will not become widespread in the Soviet Union for many years. The country would have to build a vast network of paved highways and an enormous number of garages and gas stations if motor travel in the U.S.S.R. were even to approach American proportions. Prior to World War II, Russian highways received little attention; railroads and the extensive waterways carried the vast bulk of passenger and freight

New paved roads are now being built, and there are a few four-lane highways. In 1952 the Soviet press announced that the network of improved motor roads was 3.1 times as great as in 1940. That looks like tremendous progress, especially when you consider wartime destruction, but huge percentage gains are always possible when starting from an extremely small base.

In the immediate pre-war years, the U.S.S.R., which covers one-sixth of the world's land area, had 840,000 miles of roads. But only 2400 miles were asphalted, and 60,000 miles had gravel or cobblestones; natural dirt roads predominated then and still do. Like the Communist millennium, Russia's automobile age remains far in the

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The Glove Compartment

(Continued from page 6)

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Monza. The team of "Roaring Big Reds" is withdrawing from the Barcelona Grand Prix, the English Tourist Trophy, and Indianapolis, the one big race they were never able to win. Ferrari has announced that he will close the factory near Modena and sell the team cars to private drivers. His official explanation: "Competition no longer interests me. I am tired and must look to my health."

RIDING WITH A CAB DRIVER is always an interesting experience. Other day rode with one who pointed to car ahead and said, "Look at that small car. Looks like a razor-edged box." He was talking about a Triumph Mayflower. "Sure see a lot of those little jobs now. Wouldn't have one, but would have a Jaguaree" (his pronunciation, not ours). When we drove up alongside and saw three people sitting abreast in front seat, he remarked surprisedly, "Gee, there is a lot of room at that," He was even more surprised when he found himself standing at the signal while the Mayflower darted nimbly across the street.

SOME DRIVERS HAVE NO SENSE. What prompts this remark is seeing a Michigan driver of a Ford sedan storming out from a signal, going through gears with about one foot separating his front bumper from a Lincoln's rear end. We had just pulled onto new John Lodge Expressway (Detroit) and were doing speed limit of 55 when the cars went by, nose to tail, and disappeared into distance. There's a traffic problem, but just as serious is the "driver problem."

TO CONTINUE our practice of keeping you informed on subjects published previously in MOTOR TREND (see "Gas Turbines," September issue), we have a report that gas turbine engines for cars have been the subject of officially secret experiments by the Ford Motor Co. for the past two years. Finally bringing the project into the open, Ford has asked the city council of Dearborn, Mich., to close street that runs by some of Ford's research buildings. One building, it is reported, will house gas turbine test facilities.

EVERY TIME WE ASK our readers for their opinions on any of our features, we get plenty of response. Well, we're asking you again to write us. What do you think of two of our features which we have brought over from Auto Sportsman ("Tips for Trips," page 69, and "Rambling Rags," page 82)? Auto Sportsman's readers liked them; do you? As the Car Owners Magazine, we're very proud that you keep us posted on what you enjoy or otherwise find helpful. That way we can continue to turn out the job that, according to your letters, you like best.

-The Editors



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i Venga a México!

(Continued from page 37)

There is a shortage of coins and small bills. Cash your bigger bills at gas stations and hotels. Five pesos is a big bill in a village market; zo pesos is often too much even in a postoffice.

The frontier. Getting into Mexico is simple, as these things go. You need a tourist permit (\$3 from any Mexican consul, or at the border) and a car permit (free at the border). Both permits are good for 180 days. And there is a new type of tourist permit for \$5 that allows entering and leaving Mexico as many times as you wish within the 180-day period.

Everybody in the car should have a birth certificate, or substantial proof of citizenship. Marriage certificates may be useful. Passports are good identification, but are not required. Be sure to have registration and title papers on the car. If it isn't paid for, you will need a permit from the title holder to take it out of the country. No vaccinations are required, except rabies shots for your dog. For your own protection, typhoid shots are sensible. To re-enter the United States, you must have a smallpox vaccination certificate. If you don't have it, they'll vaccinate you. Only documents required: proof of citizenship. Ask on your way into Mexico the value of purchases that you can bring out without duty. At this writing, it's \$500 a person.

Where to go. You don't need to shy away from the standard tourist spots. You'll find most of them remarkably unaffected, even indifferent, to the presence of gawking outsiders. Frankly, most of the Mexicans don't give a hoot whether you go or stay.

Probably Acapulco comes nearest to being an exception to the rule. It is the resort for Mexicans themselves, pilot model for all tropical paradises with hot and cold running water. Sailfish come the size of Cadillacs, and nearly everyone seems to be able to hook them. All the women are beautiful. The beaches, hotels, and nightclubs look like sets for an MGM musical. But behind it all (and not so far behind, either) is still a Mexican village. Prices are very high by Mexican standards at the swanky places, but still much less (dollarwise) than at U.S. resorts. Small hotels and boardinghouses are much cheaper.

Early in 1954 there will be a four-lane toll road from Mexico City to Acapulco; but unless a lot has been done since this was written, there is a long bad stretch south of Iguala. At best it's a full day's drive, but flying time is only an hour. Cost—\$19 round trip.

Acapulco by car also takes in Cuernavaca and Taxco, two places you shouldn't miss. But they make an easy one- or two-day trip by themselves.

If you can manage Oaxaca, don't miss it, but it's a long day's pull from Mexico City with no hotels available past Puebla. Again you might prefer to fly if you're pushed for time, but the drive is at least half the trip.

Now hear this! If you drive down from

El Paso, don't be in a hurry to reach Mexico City. Only about 20 miles off the road is Guanajuato, once the greatest silver-producing city in the world. Now half ghost town, it's a hillside labyrinth of cobblestone alleys and overhead bridges, like an opera set. tov

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Another gem, still mostly overlooked by tourists, is San Miguel Allende. A number of North Americans, mostly painters, have homes there. Turn off at Celaya on a paved road for the Posada de San Francisco, one of the pleasantest hotels in Mexico.

On maps you will notice a direct road from Guanajuato to San Migrel passing through Dolores Hidalgo, where Mexican independence was born. The road is mostly dirt, and narrow. Some people will tell you it is very dangerous. If you've done mountain driving in the States, you'll look in vain for the danger. This short cut won't



On the Saturday before Easter, celebrants explode effigies of Judas. Practically every holiday is an excuse for fireworks

save you time: you'll eat dust in the dry season (winter) and the road may be washed out in the rainy season (summer). But the scenery is worth it. In a rundown village between Dolores and San Miguel is a wonderful and neglected church called Atotonil-co, to which Catholic pilgrims go thousands at a time. Fantastic murals cover every inch of the walls, and the 200 hole privy is one of the real (though unadvertised) wonders of the world.

Another good idea is to turn south from the El Paso highway at Celaya (look for horse-drawn streetcars) on the road to Morelia. Morelia (capital of Michoacán and least spoiled of colonial cities) is convenient to Lake Pátzcuaro, tropical Uruápan, and the new (but already dead) volcano of Paricutín. Michoacán is handsome lake country.

These side trips, along with others over paved roads, are about as far as I would suggest getting off the so-called beaten path. Most Mexican country roads are designed for burros, not Buicks. This doesn't prevent your leaving the highway for short distances.

The little village just over the hill, or ruins towering against the horizon, may turn out more exciting than anything in the guide-books.

Hint: Indians dressed up and headed for town, toting chickens or towing pigs, indicate market day . . . maybe a fiesta.

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Information. Briefly and bluntly, there is about as little reliable information running around Mexico as there are penguins. Mexicans are extremely anxious to please. They will always tell you something. They accentuate the positive. The answer to a leading question is usually "Si, si, senor." But it ain't necessarily so. Just say the name of the place you want to go, ignore the resulting flow of words and watch the hands. A sort of circular motion with hand high, accompanied by the words derecho, derecho or luego, luego, signifies straight ahead. Butderecha (day-ray-cha) ending in a, means go to the right. We got lost at least 20 times before catching on to this nicety.

On highway conditions and such, even official sources (auto clubs, gas stations, etc.) are broken reeds.

Finally, don't kid yourself. You're going to get lost. No matter . . . some of the most interesting sights we've seen have been along the wrong road.

The stomach problem. This is a touchy question. Though usually too polite to say so, Mexicans often get the impression we are a race of hypochondriacs. It's true a lot of us over-emotionalize our insides. It's true some of us demand in suspicious voices: "Is this water dirty?" or suggest something just as crude by our attitude. Unfortunately, it is also true that intestinal disorders are a major cause of illness among Mexicans themselves; that there is very little refrigeration or plumbing available to any but the well-to-do; and that there is no assurance any public water systems are safe.

Above all, from the traveler's standpoint, the Yankee stomach in Mexico is much inclined to do nip-ups unless it is pampered. Serious stuff like amoebic dysentery is unlikely if you use any sense at all, but there is a worldwide ailment Mexicans call the turistas or the Aztec two-step, which most foreigners have periodically until their insides get acclimated. It starts with a taste of sulfur, internal rumblings, and a shakiness in the knees. A severe bout may last two or three days, during which time you will be utterly disenchanted with travel.

Why the turistas? My unreliable curbstone opinion is that the ailment frequently has nothing to do with bad food or water, and a lot to do with change of altitude. change of water (however pure) and overexertion. Mexico City is over 7000 feet; you'll go to 10,000 in places. Don't kid with this stuff. Move slowly, sleep a lot, eat lightly, lay off spiced foods no matter how much you "just love Mexican cooking." Play it safe at first, with eggs, steaks, and chops. When in doubt, ask for filete (fee-lay-tay, a general term for steak). You may not recognize it as such (Mexican butchers cut meat with a hatchet, blindfolded) but it is usually edible. Don't trust salads. Mexican coffee is ink black, or else served tepid

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half-and-half, with boiled milk in a pitcher.

Most of the above is assuming a run-ofthe-mill restaurant. The best places (there are some beauties in Mex'co City) are firstclass by any standards and require no ground rules. If you want tortillas, you will probably have to ask for them.

On the main highways, you will generally hit tourist restaurants that are more or less used to Americans. Breakfast runs about 50 cents; dinner (eaten by Mexicans in midafternoon) around a dollar. Except in the border areas and Mexico City, most hotels run American plan (meals included with room).

On day-long drives, have the hotel put up a lunch. Or you can buy cellophane-wrapped bread ('an bimbo) and make your own sandwiches. Mexican bread rolls are good, but try to get them fresh at a bakery. You can buy fruit in village markets, but stick to thick-skinned stuff like bananas and oranges.

Except in a few big places, there is no pasteurized milk. Boiled milk is always available. The newly developed canned sweet milk sounds like the answer for children, if they'll drink it (mine won't).

Purified bottled water is used in most places where you are likely to stop on the main roads. When in doubt, see where the water gets it. Acceptable substitutes are Tehuacán (mineral water, pronounced Taywah-kahn), excellent beer, and the inevitable colas. There is a Pepsi or Coke stand behind every cactus.

Vacuum bottles should be standard equipment in your car.

Tipping is indicated for almost any service you can think of.

Clothes. Mexican climate depends on altitude. Allow for everything from topcoat to straw-hat weather. It almost never rains from about November through May. You can be about as informal as you wish. Men never need dress clothes, women only at the swankiest places. Tolerance about clothes does not extend to women's slacks or shorts, except at the beach. Shorts, particularly, will label a woman as immoral. Catholic law forbids entry into a church by women "immodestly" dressed, or with heads uncovered.

Where to stay. If you lack experience and an acclimated stomach, better stick to hotels and motels catering to tourists. These are listed with government-fixed prices in the hand-out booklet called Esta Semana (This Week), printed in both Spanish and English. Prices are in pesos. For quick translation, remember a peso is a little less than 12 cents.

A great many hostelries—some of them otherwise pretty good—provide hot water only in the morning. Most rooms have private baths.

There are the usual arrangements for making reservations. Best reason for booking ahead is the possibility of encountering a big local fiests or a national holiday (particularly Christmas week and Holy Week). On the other hand, it doesn't give you a chance to shop around. Don't hesitate to look at rooms offered and, if you prefer, go elsewhere. It's the custom.

Fuel. Nothing to worry about here. You'll find gas stations rather far apart, but close enough as long as you keep filled up. Leaded gas (about 80 octane) is called Super. Regular gas is Mexolina. It's all Permex, and it comes in liters. If you have a pet brand of oil, better tote some along, although you can find most American brands in the larger places. "Fill 'er up" is *lleno* (yay-no).

Tires and spare parts. Just have good tires. The customs may object if you have more than one spare, and there's no reason why you should have. Mexican tires are a bit more expensive, but good quality. Spare fanbelts are always wise, likewise a fuel pump replacement kit. You will find a reasonable number of small garages, with specialized service for most standard cars, in cities along the main highways. There are European car specialists in Mexico City.

Driving hints. Watch out for livestock. Only the new tollroads are fenced. Burros generally stay where they belong, but they



Dressed and ready for his church blessing at the Fiesta of St. Anthony's Day (January 17) pup is cuddled by admiring owner

wouldn't move an inch for the Twentieth Century Limited. Don't barrel along where you can't see ahead.

Curves are well marked with direction arrows, but obstructions are just hinted at by piling boulders in front of them. There are no red lanterns or flares even in cities, so take it easy at night. Repeat: Watch out for those rocks!

Don't make book on having the right of way. There is no such thing in Mexico. Relax and let the other guy go ahead. In Mexico City you may prefer to get around by taxi. It's cheap and less nerve-racking, if you don't watch the cabby's driving.

Insurance. Stateside car policies don't cover you in Mexico. You have to insure with a Mexican company. Get day-by-day coverage at the border. It's about double standard U.S. rates. If you are headquartering in Mexico City, pay for just enough days to get you there. Then you can see how much you plan to use your car. If you are going to stay in the country for a couple of months

or more, take out a regular policy. It costs about the same as in the States, and you can get a refund on the unused portion.

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Language. The guidebooks will tell you English is spoken everywhere you are likely to go. From my own experience, this is a bit optimistic, especially between El Paso and Mexico City. However, the problem doesn't seem to have bothered any travelers I've questioned.

Bandits. Anybody who expects a 100 per cent guarantee against the odd guy with the gun had better not travel anywhere in North America. I doubt that the risk is greater than in many parts of the States. The usual advice against picking up strangers or letting yourself be flagged down in remote places applies. You do have to beware of sneak thieves. Never leave your car unlocked or valuables visible inside. In most towns, some kid will offer to watch your car. Better let him. Twenty to 50 centavos is the usual price. More is too high. This type of "protection" is sometimes of the Chicago variety, but you'd better pay.

Trailers. Trailer travel in Mexico is very new. However, stateside trailerites I have talked to were having a wonderful time. They reported no unusual difficulties in getting about, even with trailers as long as 35 feet. Of course they can't go meandering over back roads, and I can think of plenty of towns (notably Taxco and Guanajuato) among whose corkscrew streets I wouldn't want to get caught towing a house.

Most driving in Mexico is in mountains and at high altitudes, so you need plenty of power and a good cooling system to pull a trailer. On the other hand, grades on all main Mexican highways are reasonable. Nobody I've talked to complained of overheating. Some had trouble making it between gasoline stops and advised carrying an extra ten gallons, particularly on the Acapulco toll road.

Odds and ends. This is a wonderful place for a camera. You can get standard roll film almost everywhere. Larger cities have complete supplies. You'll see some buys in European cameras. Shadows at high altitudes are very black: Increase exposure and cut development. For color, a skylight filter will cut high-altitude bluishness. Kodachrome is now processed in Mexico City (two-day serv-

Electric current is alternating 50 cycle. Then there's the intricate question of bargaining in markets. Most prices are asking prices. If you smile sweetly and stall a bit, they may come down. Some handmade things are so cheap anyway that you probably won't have the heart to haggle.

Nobody can really reduce a country (certainly not Mexico) to the pages of a book, but one of the broadest and most readable attempts is Many Mexicos, by Leslie B. Simpson. And Frances Toor's Mexican Folkways, listing fiestas, customs, etc. is worth the five bucks to carry along. She also has a good guidebook. The Pemex Travel Bureau. Avenida Juarez, Mexico, D.F., will send you pamphlets and a map. -Don Pobe MEN WHO KNOW THE VALUE OF GOOD BRAKES DEPEND ON COP-SIL-LO



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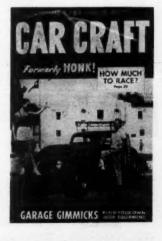
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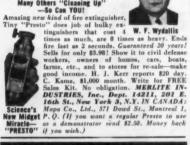
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upholstery is good, rumblesect, tires good, six wire
wheels, sidemounts. L. Carlson, 204 Stanage Ave.,
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Champaign, III. 35 SUPER EIGHT PACKARD DIETRICH conv. sedan, excellent condition throughout, tan leather uphol-stery, radio, Sealed Beams, sidemounts and mirrors, \$585 or best offer. J. Kabala, 323 Delaware St.,

\$385 or best offer. J. Kabala, 323 Delaware St., Monessen, Pa. Monessen, Pa. 1 DUESENBERG conv. roadster, Murphy body, mint and original, one of rarest, most beautiful and glamorous big league classics, photo, good offer takes. G. Salley, 1810 Golf Terrace Dr., Tallahasse, Flance, G. Salley, 1810 Golf Terrace Dr., Tallahasse, Flance, Comercia, 1910 Conv. coupe, hydraulic brakes, '40 Ford rear end, new tires and rebuilt engine, \$230. R. Comstock, 202 Betsy Brown Rd., Port Chester, N.Y. '27 CHRYSLER roadster, model 52, renewed and rebuilt, Michigan antique license, Class 17 VMCCA, also would like to correspond with owners of similar models. B. Woodell, 1300 Gardner, Ann Arbor, Mich.

lar models. B. Woodell, 1300 Gardner, Ann Arbor, Aich.

'29 PACKARD 8-cylinder 7-passenger limousine, good body, tires and interior, engine recently overhauled, priced right at \$250, no photos. S. Benson, Will Grove Rd. Elmer, N.J. Elmer 87522.

'27 STUDEBAKER REGAL sedan, 19,000 original miles, perfect condition throughout, \$200. R. Machus, 1015 S. Carpenter, Iran Mountain, Mich. ONE 36x4 GOODYEAR CLINCHER tire, very old but never used on vehicle, \$30. R. Machus, 1015 S. Carpenter, Iran Mountain, Mich.

'37 CORD 812 canv. phaeton, Mercury engine, transmission and rear end. Engine just rebuilt, body in good condition, \$700 or best offer. R. Foster, 224 Ellsworth Ave., Anaheim, Calif.
'38 V-6 PACKARD, six good tires and wheels, have spent about \$600 on it. Will sell for \$330. Have two others, this is a sedan. G. Strickler, 415 N. 10th St., Boise, Idaho.

spent about \$500 on it. Will sell for \$350. Frare two-chers, this is a sedan. G. Strickler, \$15 N. 10th St., \$60 ise. Idaho.

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32 BUICK five-passenger sedan, sidemounts, excellent condition throughout, original dark green finish, upholstery like new, very good tires, owners manual, drive anywhere. D. Shrader, Grundy, Va.

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Next month we are initiating a new program in this department: With your ad, we'll publish selected photographs of cars you want to sell or swap. There's no cost to you, but we'll have to decide which photos to use. Sorry, no photos can be returned.—Editor

'33 PACKARD Super Eight conv. coupe, new black lacquer, six cream wire spoke wheels, engine recently overhauled, almost new top, 95% restored, 5950. P. Martin, 309 N. West St., Tipton, Ind. STUDEBAKER ENGINE, brand new, ideal for MG, Stato, o oads.e. conversion. R. Cole, 38 Aldred Ave., Rockville Centre, N.Y.
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'16 SAXON four-cylinder roadster, five new tires, new wiring, electric lights and starter, needs top covered and upholstery, \$495 or best offer. T. Thoburn, Jr., 2729 Ashley Rd., Shaker Heights 22, Ohio.

'40 DARRIN PACKARD 180 four-door conv.

Ohio.

40 DARRIN PACKARD 180 four-door conv. sedan, one in existence, new lacı top, well cared for, pic on page 54 Sept. MT, \$1880 or best offer. 1t. Col. A. Tisdelle, Orange Park, Fla.

LINCOLN CONTINENTAL conv., 39,000 miles, car maroon with week old white plastic top, new custom naugahyde upholstery burnished ivory color, spoken wheel discs, \$2550. B. Absel, 25 Pacific Coast Hwy., Hermosa Beach, Calif. FR 43436.

51 FERRARI America 4100 cc Vignale two-place coupe, black and green, green leather upholstery, engine recently overhauled at Modena, 250 hp, phenomenal performance, new gearbox, \$7500. V. Corradini, 144 Wyoming Ave., Maplewood, N.J.

138 MAYBACH ZEPPELIN five-place sedan, 8-liter engine, 8 speeds forward, this automobile in new condition, only 15,000 miles since new, cost \$30,000, sell for \$3850. V. Corradini, 144 Wyoming Ave., Maplewood, N.J. Maplewood, N.J.

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'38 MERCEDES BENZ 540-K close coupled coupe, engine overhauled at factory, body and paint as new, only 1500 miles since overhaul, \$3850. V. Corradini, 144 Wyoming Ave., Maplewood, N.J.

'51 TALBOT LAGO grand sport 190 hp 4½-liter Wilson gearbox, new chrome wire wheels and white tires, streamlined two-three place coupe by Figoni and Falaschi, cost \$15,000, sell for \$6500. V. Corradini, 144 Wyoming Ave., Maplewood, N.J.
'29 ERSKINE, mint condition, four-door, runs perfect, heater, good tires, perfect upholstery, no dents, no broken glass. P. Raubach, Valentine, Nebr.

Nebr. '37 AUBURN supercharged 8-cylinder conv. coupe, new upholstery, paint, Diesel babbit in bearings, has overdrive, can be driven any place, \$700 cash. J. Sciolaro, 41901/2 Yosemite Way, Eagle Rock, Calif.

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36 PIERCE ARROW V-12 town car, 14,000 true miles, excellent condition, pic on request, \$850. R. Wingate, 1009 Washington, E. Weymouth, Mass.

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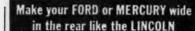
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L-29 CORD conv. coupe, fair condition or better, state price, pic if possible, give details of condition. H. Bryan, 2600 S. Main St., Findlay, Ohio.
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'37 CORD conv. five-passenger coupe, new Hall padded top, rebuilt '42 Mercury engine, car needs mare work, tow away, \$700 or swap for?. V. Le Fontaine, 909 Howthorne Dr., Lafayette, Calif. K.-2 ALLARD roadster, '53 unmodified Cadillac engine, Lincoln gears, 9000 miles, turquoise, will sell or swap for conventional car. P. Macurdy, 1311 W. Pikes Peak, Colorado Springs, Colo.
'48 LINCOLN CONTINENTAL hardtop, perfect original condition, 3000 miles since overhout, \$2250. Accept swap any model, American or foreign, write for free pics and information. H. McSweany, 2216 Osage St., Mobile, Ala. Phone 67733.
'21 BUICK touring, restored, fine condition, the top being only item not replaced, forced to sell, worth \$1000, asking \$650. W. Solomon, La Vale, Md. SEVERAL NEW '52 Olds Quadri-Jet carburerors, \$25 or swap one for '49 Olds solid valve lifters or Ford dual manifold, &1 head. E. Schuster, 110 N. Dallas St., Tulia, Texas.
MODIFIED FRAME, '52 Henry J Six for Glasspar body, complete front end, rear springs, body and engine mounts, \$225 or V-8 60 complete '44 street engine. J. Jenkins, 7900 2nd Ave., Dallas 17, Texas. L-31 CORD conv., rumb'e-ear, ridemounted spare wheels, near perfect condition, will sell or swap for late model car, photo furnished on request. R. Kissick, 426 Flemingsburg Rd., Morehead, Ky.
'37 CORD Beverly sedon, model 812, overhouled engine, transmission and brakes, extra transmission parts, all standard throuchout, \$815, ahn'so available. B. Allen, 368 Third St., Son Bernardino, Calif. '41 CADILLAC conv. in excellent condition with 44 engine, \$1000. Want '36 or '37 Cord conv., body in restorable or towable condition. H. Kallio, 131 Ann Ave., Jacksonville 5, Fia.

OLDS 88 engine, newly rebuilt, complete with all accessories, 12-volt generator, \$275. J. Christenson, 3223 N. Adams Rd., Birmingham, Michigan. M. 49190.

3223 N. Adams Rd., permingerum, Adams P. 49190.
TRIUMPH SALOON custom aluminum Mulliner body underslung tube frame, right-hand drive, rate model, excellent shape, will swap for MG or conv. or best offer. R. Bisbee, 1342 Winnemac Ave., Chi-

ar best offer. R. Bisbee, 1342 Winnemac Ave., Cnicago 40, III.
SEVEN 30x31/2 TIRES in very good condition. No reasonable offer refused or will swap for any 25-inch tires, 32x31/2, 33x4, or 34x41/2. R. Gigante, 30 College 5t., Buffalo 1, N.Y.
CUSTOM FIBERGLAS sports car, custom frame, new Studebaker V-8, overdrive, 2500 miles on car, like new throughout, \$2505. Consider part trade. R. Martin, 460 S. Orange, Orange, Calif.
'30 P II ROLLS ROYCE sedan; recent Inskip overhaul and in excellent mechanical condition, Barker body

and in excellent mechanical condition, Barker body good and good tires, can be driven anywhere. \$1000 or consider trade of Pierce conv. H. Pierce Jr., Stratton Rd., New Rochelle, N.Y.

SWAP

'50 MANNLICHER-SCHOENAUER .270, fired once, perfect condition, for '34 or '35 Ford phaeton, must run and be restorable, no wrecks or junk. J. Francis, 924-C S. Gravillea, Inglewood 1, Calif. STEAM LOCOMOTIVE, 34 in. scale, 2.8-4, precision workmanship, perfect condition, value \$2500. For steam automobile, prefer Stanley, Doble, or White. B. Acker, 320 Park St. So., St. Petersburg, Fla.

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Dealers' Inquiries Invited

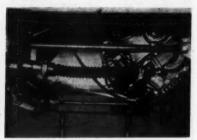
CUSTOM RADIO FOR 1952-53 FORDS SUPERHETERODYNE - BIG 6 × 9 INCH SPEAKER - LOW BATTERY

DRAIN - EASY INSTALLATION LITERATURE ON REQUEST PERMEABILITY TUNES NORDIC RADIO COMPANY - BOX 582 - EVANSTON, ILL.

TRENDS IN PRODUCTS



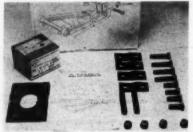
WHEN THE HIDE-AWAY TRAILER hitch is not in use, it is completely hidden under the bumper. Constructed of steel plate and angle iron, the Hide-Away is said to accommodate large house trailers. It can be installed with a drill and wrench; no welding necessary. A spring is used to make the unit rattle-free. Price, \$25.00 postpaid. MT-118.



ACCORDION-LIKE DESIGN of Voit's flexible radiator hose enables it to bend and stretch with body or chassis movement. The hose was used on every car in this year's "500," and, says the manufacturer, it achieved its popularity because of its ease of installation, ability to go "around corners," longevity, and economy. Endorsed by many Indy mechanics. MT-119.



DOK ENGINE CONDITIONER is especially recommended for high-performance engines by the manufacturer, who says his product improves engine performance, gives more power, better acceleration, stops carbon knock, keeps carburetors clean, and removes gum and carbon from upper cylinder areas. Regular use is said to keep heads carbonfree. Price (eight-ounce can), \$1.25. MT-120.



WELL-KNOWN VALLEY CUSTOM Shop has announced the first product of its newly organized custom products branch. It's a lowering kit for independent front suspensions, designed for Fords, Mercurys, and Lincolns. The kit, in either bolt-on or weld-on design, is said to give a 21/2 inch drop but allows the car to retain normal spring action. MT-121.



USING AN INTERESTING diffusion principle to reduce back-glare to the driver, this new road light is claimed to provide safer driving in all types of inclement weather, be it fog, mist, rain or snow.

The easily installed kit includes the two lamps, wiring, foot control switch, relay, and detailed instructions. Available for six- or 12volt cars. MT-122.



THE SELECTA PADIATOR SHUTTER. imported from Holland, allows the driver to maintain any degree of engine temperature by a simple dash control. Designed for use on any car, it is said to be ideal for a car that runs hot in summer and cold in winter; also said to be just the thing for cars which run too hot with thermostats. Installation kit, \$11.95. MT-123.

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No

This department is not composed of paid advertising. All items listed are guaranteed for immediate refund if you are not satisfied. If you want to buy any item or items, or obtain additional information, write to TRENDS IN PRODUCTS, 3939 Hollywood Blvd., Los Angeles 28, Calif. Be sure to identify the items by number.



MOTOR FORMULA 9 is an oil stabilizer that produces a slick film over motor parts to reduce friction, engine heat, carbon, and motor knock, according to company spokesmen. A money-back guarantee is offered if MF-9 doesn't give your car more than a dozen operating benefits. A 15 ounce can sells for \$1.50, postpaid. Dealer inquiries invited. MT-124.

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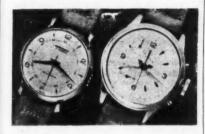
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NOW YOU CAN WATCH the races and clock car speeds at the same time. The distributor tells us this Swiss chronograph has separate second and minute dials, an automatic sweep hand and luminous dial. The 17-jewel watch on the left is said to be shock-resistant, has raised, golden numerals. Both watches are priced at \$14.95, postpaid. Guaranteed. MT-125.

DESIGNED originally as a device to lower a headlight glare shield by foot-button, this solenoid kit (said to be valued at \$17.95) comes complete with a seven-foot flex cable, a three-contact toggle switch, a relay with fuse and mounting bracket, miscellaneous hardware, and the polaroid glare shield. Can be used on deck lids, hoods, etc. Price, \$8.50 postpaid. MT-126.

NO OIL PRESSURE—no ignition! Oiltrol, a hydroelectric switch, controls the electric current to the ignition by the oil pressure of the engine. Designed as a safety precaution, it prevents you from running the engine with no oil pressure. Oiltrol units are available for nearly every make and model car, truck, or tractor. Simple installation. MT-127.

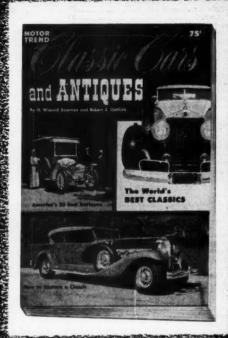
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DON'T MISS CLASSIC CARS AND ANTIQUES MORE THAN 225 PHOTOGRAPHS ILLUSTRATE THE RARE AND REMARKABLE AUTOMOBILES IN THIS AUTHORITATIVE NEW TREND BOOK; WITH FACTS ON HOW TO FIND—BUY—SELL—RESTORE—AND ENJOY THESE SPECIMENS OF A PAST BUT LAMENTED ERA.

Lou ON YOUR NEWSSTAND

-or order by mail: send 85c (postage included) to Trend Books, 5959 Hollywood Boulevard, Los Angeles 28, California



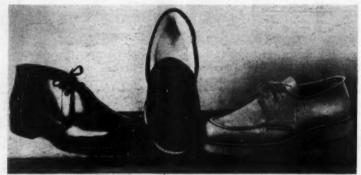
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Eighty-two

Rambling Rags







Suits made of DuPont's Dacron polyester fiber are said to be a blessing to the modern motorist. Now being introduced in limited quantity, the suits are made by various manufacturers in full Dacron and in combinations with wool or rayon. Outstanding wrinkle-resistance (especially when wet) and long-lasting freshness are but a few of its claims.

If you're an ex-Air Force pilot, you'll be certain to recognize the chukka boots on the left. Once again available, these top comfort items are by French. Shriner, and Urner, as are the fleece-lined leather slippers (in many colors) and the long-wearing, smart-looking loafers. Look for the French, Shriner, and Urner sign at better shoe stores all over the U.S.

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You'll see few Maxwells along Fifth Avenue these days, but Brook's new short-collared, lightweight broadcloth blouse is right up to the minute in the style parade. Vat-dyed and Sanforized for safe washing, the shirt is made with French cuffs, sizes 10 to 18, and retails for \$5.95.

For retail sources write MOTOR TREND, Dept. 511

NEXT MONTH

With Christmas coming, it is only natural for you to start thinking about gifts for your relatives and friends. We'll help you out on this problem, with a special section on

"GIFTS FOR YOUR CAR"

This is the time of year for new ideas for entertainment; you'll like our fun contest with prizes:

"DO YOU KNOW YOUR CARS?"

Then, of course, there are many other features, including some recent history you'll not want to miss:

"SPORTS CARS—REVOLUTION OR EVOLUTION?"

In the December MOTOR TREND, combined with Auto Sportsman.

> ON YOUR NEWSSTAND NOVEMBER 25TH

EDITORS' IMPARTIAL TESTS PROVE:

New Self-Charging Battery Outlasts, Outperforms Others 221%

Afew months ago, we started producing a new battery which we frankly believe to be many years ahead of its time. When we announced that this new battery developed 15 amperes more power than other batteries and would automatically bounce back to life again and again after being deliberately and completely discharged, technical editors of leading magazines raised their evelrows.

When we added that we had named it the *Life* time Battery because of its *life* (meaning exceptional power) and the *time* it would last (3 to 4 times as long as ordinary batteries), and that we guaranteed it for *six years*, these editors were understandably doubtful, to put it mildly. One publisher, in fact, refused to accept advertising for this battery until what he then considered to be our extreme claims were carefully tested.

One of the editors said: "Let us test this battery, any way we see fit. If it does what you claim, it's news our readers will be interested in. If it's no good, our readers will be interested in that, too, and that's the way we'll write the story." We said "go ahead" and they took a standard *Life*time Battery off the production line and went to work.

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You may have read the result of the first test in a famous automotive magazine (name on request). Using two well-known batteries (possibly the best-known high-quality batteries in the world) for comparison, they first ran the Lifetime Battery down completely and let it re-charge itself automatically. They repeated this test 43 times the first day, then compared its strength with the other two batteries. Results: the Lifetime Battery was 204% stronger than the strongest of the other two batteries. They discharged the Lifetime Battery another 20 times, allowing it to re-charge itself automatically each time, and compared all batteries again: the Lifetime Battery was now 213% stronger than one battery, 221% stronger than the other! Next, they put a punishing 300-amp load on the Lifetime Battery; it survived that in good shape. So they repeated the self-recharging test again and finally concluded: "... unprecedented life expectancy . . . remarkable recuperative characteristics . . . outperformed the others in every respect and by a comfortable margin an outstanding value.'

The editor of another magazine (name on request) heard about the tests and asked to "give the thing a real test, one that would burn up the average battery." We gave him the same battery and challenged him to "finish it off." He installed it in his own car and drove the car on the battery alone, shifting gears as he would normally, until his "fingers were sore from holding the starter key... I hate to admit it, but I was outlasted by a battery."

Still another editor wrote: "... definite battery improvement ... geater recuperative power, greater initial output... obviously high quality."

During in dependent tests in Alaska and the U.S., the Lifetime Battery was intentionally discharged under sub-freezing conditions, recharged itself automatically & started car at once!



Engineered for Cold Climates

Soon after the *Lifet*ime Battery went into production, we selected a few dealers in northern U.S. and Alaska, shipped them a few batteries and waited to see how the dealers and the public would react. Our Alaska dealer told us that before presenting it to his customers, he was going to give the battery an Arctic test: discharge it completely then freeze it at 30 below zero for 72 hours. Result: the battery had recharged itself and immediately started the car. Immediately we received a telegraphed order from Alaska for \$6,043 worth of *Lifet*time Batteries!

6-Year Guarantee Saves You Up to \$107

The average deluxe battery lasts 1.4 years at a typical cost of \$25.00, or \$107.00 for a 6-year period. This arithmetic is making sense to people who are tired of throwing money away on batteries that just won't hold up. We believe it will make sense to you, too—particularly since the *Lifetime* Battery you buy now can easily be transferred to your new car whenever you trade in.

12-volt and 6-volt Available

Here's more arithmetic that makes sense: the *Lifetime* Battery sells in the U.S. at one price for all cars: \$29.95 for 6-volt, \$34.95 for 12-volt including excise tax.



Supply Limited: Order Today by Mail!

Although plant facilities are being expanded, supply is still limited. If your dealer can't supply you, order direct by mail from the factory; we pay freight.

CONTINENTAL MANUFACTURING CORPORATION (Marketing Division, Consolidated Engineers)

Dept. MT-11, Washington Boulevard at Motor Avenue, Culver City, California

Dealers NOW BEING APPOINTED TO HANDLE DEMAND

Dealerships are now being awarded to take care of demand generated by \$1,000,000 advertising campaign plus articles in national magazines. Write today for full information, including reprints of editors' tests and case histories from present dealers.

Washington Bl Please ship Life	anufacturing Corporation, Dept. MT-11 vd. at Motor Ave., Culver City, Calif. time Battery at once: (\$29.95 including tax)
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THE POWER FLOW Balanced Exhaust System is the latest and greatest engineering achievement of Douglass. This is a header set precisioned to fit your car, reduce back pressure tremendously, and deliver increased horsepower where it is needed... to the rear wheels.

when we talk of Douglass.

Ask the Muffler Specialist in your neighborhood about the advantages of Douglass. You will find Douglass equipment at all good Automotive Parts Dealers and Speed Shops.



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